

IN THE MATTER OF THE JOINT REVIEW PANEL ("JOINT PANEL")
ESTABLISHED TO REVIEW THE JACKPINE MINE EXPANSION,
FORT MCKAY, ALBERTA, ("PROJECT") PROPOSED BY SHELL
CANADA LIMITED ("SHELL")

AND IN THE MATTER OF ALBERTA ENERGY RESOURCES
CONSERVATION BOARD ("ERCB") APPLICATION NO. 1554388

AND IN THE MATTER OF CANADIAN ENVIRONMENTAL ASSESSMENT
AGENCY ("AGENCY") CEAR NO. 59540

AND IN THE MATTER OF THE *ENERGY RESOURCES CONSERVATION*
ACT R.S.A. 2000 C. E-10

AND IN THE MATTER OF THE *OIL SANDS CONSERVATION ACT*,
R.S.A. 2000, C.0-7

AND IN THE MATTER OF THE *CANADIAN ENVIRONMENTAL*
ASSESSMENT ACT, 2012, S.C. 2012, C. 19, S. 52

BY THE
ALBERTA ENERGY RESOURCES CONSERVATION BOARD AND THE
GOVERNMENT OF CANADA

PROCEEDINGS AT HEARING

NOVEMBER 20, 2012

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Four Points by Sheraton Edmonton South
7230 Argyll Road
Edmonton, Alberta

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Tuesday, November 20, 2012

(8:30 a.m.)

(Edmonton, Alberta)

THE CHAIRMAN: Good morning, everyone. Is there any housekeeping? Mr. Perkins.

HOUSEKEEPING MATTERS SPOKEN TO:

MR. PERKINS: Mr. Chairman, we, and I mean the Secretariat, has received the responses from ACFN witnesses, and Dr. Schindler, as well as a reply to that from Shell, and we'd like to suggest exhibit numbers for that material. I can run down the list, if you'd like.

THE CHAIRMAN: Thank you.

MR. PERKINS: The response from Dr. Komers Dr. Gutsell, and Ms. Hechtenthal, we'd like Exhibit No. 006-030 for that.

**EXHIBIT 006-030: RESPONSE FROM DR. KOMERS
DR. GUTSELL, AND MS. HECHTENTHAL**

THE CHAIRMAN: Thank you.

MR. PERKINS: For Mr. Bruce MacLean,
006-031.

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EXHIBIT 006-031: RESPONSE FROM MR. BRUCE MACLEAN

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MR. PERKINS: And for Dr. Candler, 006-032.

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EXHIBIT 006-032: RESPONSE FROM DR. CANDLER

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MR. PERKINS: For OSEC, Dr. Schindler's

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response, if we could have 017-051.

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EXHIBIT 017-051: DR. SCHINDLER'S RESPONSE

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MR. PERKINS: And as a separate number, and

14

I hope I describe this correctly, the Rasmussen

15

World Class Graph, 017-052.

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EXHIBIT 001-052: RASMUSSEN WORLD CLASS GRAPH

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MR. PERKINS: And finally, sir, the reply

20

from Shell, if we could have exhibit number 001-116

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for that, sir.

22

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EXHIBIT 001-116: REPLY FROM SHELL

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25

THE CHAIRMAN: Thank you.

1 MR. PERKINS: Thank you, Mr. Chairman.

2 THE CHAIRMAN: Is there any other

3 housekeeping? I take it not.

4 Is Shell ready to proceed with its argument?

5 Mr. Denstedt?

6

7 **FINAL ARGUMENT BY SHELL CANADA, BY MR. DENSTEDT:**

8 MR. DENSTEDT: Thank you, Mr. Chairman, and

9 Members. I'm pleased to be here today to present

10 final argument on behalf of Shell Canada Limited

11 for the Jackpine Mine Expansion Project, which I

12 will refer to generally as "the Project" in my

13 remarks today.

14 I've provided a copy of my notes to the Court

15 Reporter and I'd ask that the headings and the

16 evidentiary references be included in the

17 transcript so that I need not to refer to them as I

18 go. Where I deviate from my notes, I would ask

19 that my oral remarks be reflected in the

20 transcript.

21 Mr. Chairman, developing an oil sands mining

22 project is not an easy task. It requires financial

23 strength to provide the financial wherewithal to

24 ensure processes to capitalize and execute a

25 multi-billion-dollar project, technical expertise

1 to ensure processes are constantly reviewed and
2 improved, environmental responsibility to ensure
3 environmental impacts of development are avoided,
4 minimized or mitigated, and social responsibility
5 to ensure all of this is carried out in a manner
6 that provides information to stakeholders, involves
7 them in decisions that affect them, and provides
8 assistance where appropriate.

9 Shell, Chevron and Marathon embody all these
10 traits.

11 Shell has been involved in the oil sands
12 since the 1950s. Shell already operates the Muskeg
13 River Mine and the Jackpine Mine Phase I, and has
14 demonstrated that it can operate oil sands projects
15 in a responsible way.

16 For example, the Jackpine Mine was started up
17 in 2010 without a single process safety incident.

18 In 2011, Shell was awarded CAPPs Health and
19 Safety Performance Award for its oil sands
20 operations.

21 Shell has a proven track record of
22 successfully constructing and operating projects of
23 this type and magnitude.

24 Shell has been working with regulators and
25 stakeholders for more than six years to study the

1 potential impacts of this Project and optimize
2 plans to avoid or minimize those affects.

3 The reason that the Pierre River Mine was
4 combined with this Project for the purposes of the
5 EIA was to address stakeholders' and regulators'
6 desire to see Shell's full development plans for
7 the oil sands.

8 Shell's testimony was that the baseline
9 studies for this Project were the most extensive
10 that have ever been conducted for oil sands
11 projects. Shell has responded to more than 1500
12 Information Requests from regulators and
13 stakeholders and filed more than 20,000 pages of
14 documentation in support of this Project.

15 Through this process, Shell has significantly
16 modified the Project to assess concerns that have
17 been raised and to meet evolving regulatory and
18 economic developments. The result is a project
19 plan that balances Shell's obligation to develop
20 the province's oil sands resources and the need to
21 ensure that development is done in an
22 environmentally and socially acceptable manner.

23 For the reasons I am going to discuss,
24 Mr. Chairman, Shell has clearly demonstrated that
25 this Project is in the public interest and should

1 be approved.

2 So let me start with the nature of this
3 application.

4 First of all, Shell is applying to the Energy
5 and Resources Conservation Board and Alberta
6 Environment and Sustainable Resource Development to
7 amend and renew the Jackpine Mine approvals in
8 order to expand the already existing Jackpine Mine
9 development, and the area underlying the oil sands
10 resources to increase the production by 100,000
11 barrels per day to an average nominal capacity of
12 300,000 barrels per day.

13 The proposal will allow for a development of
14 the resource contiguous to the already approved
15 Jackpine Mine in a northerly direction
16 incorporating Leases 88, 89, AT-36, 15 and 631.
17 The additional mining area and equipment,
18 processing facilities and other infrastructure will
19 extend the life of the Jackpine Mine to 2050.

20 Updated and expanded tailings management,
21 reclamation and closure plans for the Jackpine Mine
22 are also included in the Application.

23 To implement the proposed development, Shell
24 will require an amendment to ERCB approval number
25 9756C for the additional mining tailings and

1 processing facilities pursuant to Section 13 of the
2 ***Oil Sands Conservation Act***.

3 It also requires renewal and expansion of the
4 10-year operating APEA approval and renewal and
5 amendment of the Jackpine Mine ***Water Act*** approval.

6 Shell will also require approvals from
7 various federal regulators concluding a new
8 authorization under Section 35(2) of the ***Fisheries***
9 ***Act*** for the harmful alteration and destruction of
10 fish habitat in the new project area, and a river
11 crossing approval under Section 5 of the ***Navigable***
12 ***Waters Protection Act*** for bridge and utilities
13 crossings.

14 In addition, Shell will apply for a variety
15 of ancillary approvals if the expansion is found to
16 be in the public interest. And the potential
17 environmental impacts of these ancillary works have
18 been included in the Environmental Impact
19 Assessment that is before this Panel.

20 Let me start with a review of the legal
21 framework and the Joint Review Panel that the Joint
22 Review Panel is operating under, and the dual roles
23 and responsibilities of this Panel. And I'll
24 briefly go through some of the specific
25 requirements of a CEAA review and an EIA under the

1 **EPEA** as I deal with the merits of the Application.

2 Environmental Assessment is the first formal
3 step towards project approval and is required to
4 ensure environmental matters are considered early
5 in the Project's planning stage to both protect the
6 environment and to avoid the waste of resources.

7 One of the reasons for conducting an
8 Environmental Assessment early in the planning
9 process is so that the Environmental Assessment can
10 influence design decisions, execution plans,
11 mitigation, and monitoring. It is well accepted in
12 Canadian jurisprudence that environmental
13 assessment is a planning tool used to help achieve
14 the goal of sustainable development by providing an
15 effective means of integrating environmental
16 factors into planning and decision-making processes
17 early in the planning stage of projects.

18 Under the **Canadian Environmental Assessment**
19 **Act**, the focus of an assessment is to determine
20 whether the likely environmental effects of a
21 proposed Project are significant and, if so,
22 whether they can be justified. Information that is
23 produced through the Environmental Assessment
24 process that shows broader cumulative effects
25 through the region, particularly information

1 showing changes from pre-industrial conditions to a
2 Planned Development Case is useful to inform
3 regional planning but should not be used to make
4 decisions on whether a specific project is in the
5 public interest and should be allowed to proceed.

6 In January of 2007, Shell filed a Project
7 Description for the Project and the Pierre River
8 Mine project with the Federal and Provincial
9 Governments. The Draft Terms of Reference for the
10 EIA were provided for stakeholder and regulator
11 input, including input from Aboriginal groups,
12 Environment Canada, Health Canada, and Fisheries
13 and Oceans Canada. These Terms of Reference were
14 finalized in November of 2007 and the Application
15 for this Project was filed the following month.

16 Between 2007 and 2010, Shell responded to
17 three mounds of supplemental information requests
18 from the ERCB and ESRD, as well as Information
19 Requests from Environment Canada, Health Canada,
20 DFO, Natural Resources Canada, and Transport
21 Canada. Shell also responded to hundreds of
22 technical review questions from Aboriginal groups.

23 In October of 2010, Alberta Environment
24 deemed the EIA complete.

25 In December of 2010, the review of the

1 Project was referred to a Federal Review Panel on
2 the request of the Minister of Fisheries and
3 Oceans.

4 A Joint Review Panel agreement between the
5 ERCB and the Government of Canada was finalized on
6 September 13th of 2011 to allow a joint review of
7 this Project.

8 The agreement sets out the mandate and
9 authority of the Panel, its composition and project
10 review guidelines. This joint review must satisfy
11 the requirements of the CEAA, the ***Oil Sands***
12 ***Conservation Act***, and the ***Energy Resources***
13 ***Conservation Act***. The Panel has distinct
14 obligations under each of those Acts.

15 As the ERCB, the Panel is guided by the
16 purposes outlined in the ***Oil Sands Conservation***
17 ***Act***, and let me just run through those purposes for
18 you this morning:

19 To effect conservation and prevent waste of
20 the oil sands resources of Alberta.

21 To ensure orderly, efficient and economical
22 development in the public interest of the oil sands
23 resources of Alberta.

24 To assist the government in controlling
25 pollution in the development and production of the

1 oil sands resources of Alberta.

2 And to ensure the observance in the public
3 interest of safe and efficient practices in the
4 exploration for, and the recovery, storing,
5 processing and transporting of oil sands discard
6 crude bitumen derivatives of through bitumen and
7 oil sands products.

8 While performing this ERCB function, the
9 Panel must also have regard to Section 3 of the
10 ***Energy Resources Conservation Act*** which requires
11 the ERCB to give consideration to whether this
12 Project is in the public interest having regard to
13 the social and economic effects of the Project and
14 the effects of the Project on the environment.
15 It's a blend of all those obligations that this
16 Panel must fulfill as the ERCB.

17 The Panel's mandate is broad. It must
18 consider the interest not only of the Applicant and
19 Interveners in this specific case, but also the
20 interests of all Albertans who own the resources
21 and have leased the rights to and imposed the
22 obligations on Shell and its joint venture partners
23 to recover these resources.

24 In determining whether a proposed energy
25 development, in this case the expansion of the

1 Jackpine Mine, is in the public interest, the Panel
2 is charged with balancing the Proponent's property
3 rights in its lease, the public's legitimate
4 expectations to receive value from the resources it
5 owns, the economic benefits of the proposed Project
6 such as jobs, taxes and royalties, and the
7 potentially negative environmental and social
8 impacts of the Project.

9 It is Shell's position that the evidence
10 overwhelmingly demonstrates that the Jackpine Mine
11 Expansion meets the purposes of the legislation and
12 that approving this Project is in the public
13 interest.

14 Under the CEAA, and the agreement, the Panel
15 must conduct an environmental assessment of the
16 Project by collecting and considering the evidence
17 it considers is necessary to make recommendations
18 on whether the Project is likely to result in
19 significant adverse environmental effects. This
20 Panel must consider the following issues as part of
21 its CEAA mandate:

22 The need for and purpose of the Project;
23 alternatives to the Project and alternative means
24 of carrying out the Project; environmental effects
25 of the Project, including the likelihood and

1 significance of those effects within temporal and
2 spatial boundaries; impacts and the capacity,
3 impacts on the capacity of renewable resources to
4 meet the needs of present and future generations;
5 possible accidents and malfunctions from the
6 Project; and Shell's proposed monitoring and
7 adaptive management programs.

8 Shell has addressed all of these matters in
9 its evidence filed with the Panel.

10 Finally, I would like to briefly outline the
11 Panel's responsibilities with respect to Aboriginal
12 issues.

13 Section 6 of the Joint Review Panel Agreement
14 allows the Panel to receive information from
15 Aboriginal groups related to the nature and scope
16 of their Aboriginal and Treaty Rights in the
17 Project area, as well as the potential adverse
18 environmental effects on those rights.

19 The Terms of Reference for the Panel also
20 require that the Panel consider any evidence
21 concerning potential Project effects on established
22 or asserted Aboriginal or Treaty Rights, including
23 the potential effects on traditional land and
24 resource use and access into areas used for
25 traditional uses, and Shell's plans to mitigate any

1 such effects.

2 This information must be considered by the
3 Panel in determining whether the Project is likely
4 to result in significant adverse environmental
5 effects, but the agreement is clear, that the Panel
6 is not required to determine the validity of any
7 asserted rights, the scope of the Crown's duty to
8 consult, or whether the Crown has met its duty to
9 consult.

10 With that in mind, Mr. Chairman, I would like
11 to review what Shell believes are the key issues
12 raised at this hearing. And they were:

13 The need for the Project; alternatives to the
14 Project and means of carrying out the Project; the
15 various environmental issues; Aboriginal
16 consultation and impacts on traditional land and
17 resource use; regional, socio-economic impacts and
18 infrastructure and intensity of development; and
19 finally, technical operations and resource recovery
20 issues.

21 Shell submits that all of these issues have
22 been addressed in its evidence and the Panel can
23 rely on the conclusion in Shell's EIA which is a
24 comprehensive and conservative assessment of the
25 Project's potential impacts.

1 Further, we provided a Table of Concordance
2 for this argument, and the Panel's list of issues
3 that was set out last Friday, and I'd ask that it
4 be included as an addendum to this argument.

5 So let me start with the need for the Project
6 and the Project's alternatives.

7 Shell analyzed the need for the Project as
8 well as alternatives to and alternative means of
9 carrying out the Project in accordance with the
10 Canadian Environmental Assessment Agency's
11 Operational Policy Statement on need, purpose and
12 alternatives. The OPS defines need for a project
13 as the problem or opportunity the project is
14 intending to solve or satisfy. In contrast, the
15 purpose of a project is what is to be achieved by
16 carrying out that project. The OPS states that the
17 need for and purpose of a project should be
18 established from the perspective of the project
19 proponent and that provides the context for
20 consideration of alternatives to the scoped
21 project. Similarly, alternatives to a project are
22 to be considered in relation to the project need
23 and purpose and also from the Proponent's
24 perspective.

25 In terms of the need for the Project, Shell

1 has made considerable investments in obtaining its
2 lease holdings in the Athabasca Region and defining
3 its resources. The leases for the Project contain
4 approximately two billion barrels of recoverable
5 bitumen. Shell has responsibility to its
6 shareholder and project partners to develop these
7 lease holdings in economically efficient ways in
8 order to realize value from its investments.

9 In addition, Shell has a legal obligation to
10 the people of Alberta, who own the resource, to
11 develop it in a timely and efficient manner.

12 The Project is an expansion of an existing
13 mine and will take advantage of existing facilities
14 and infrastructure. The Project will also allow
15 development of the existing Jackpine Mine Phase I
16 to be optimized through integration with the
17 expansion.

18 More generally, the Project will provide
19 benefits to the people of Alberta and the rest of
20 the country.

21 Developing this Project will cost
22 approximately eight to twelve billion dollars.
23 That investment will result in increased
24 employment, income, business revenue, and
25 government revenue. The Alberta economy is

1 expected to receive 50 percent of the total
2 construction expenditures for the Project amounting
3 to between four and six billion dollars. Of this,
4 between 265 and 400 million dollars will accrue to
5 regional companies and workers. During Project
6 operations, annual expenditures will be in the
7 hundreds of millions of dollars, 40 percent of
8 which will be spent on regional companies and
9 workers and 75 percent of which will be spent in
10 the province of Alberta.

11 Outside of Alberta, businesses and workers in
12 the rest of Canada are expected to receive between
13 two and three billion dollars in project
14 construction expenditures, and almost 10 percent of
15 annual operating expenditures.

16 For the Federal and Provincial Governments,
17 the Project is estimated to generate \$17 billion in
18 royalties and taxes over its life. This is over
19 and above the taxes and royalties already
20 associated with the Muskeg River Mine and the
21 Jackpine Mine Phase I.

22 The Project will also add to the Regional
23 Municipality tax assessment base and at current
24 rates will pay between 23 and 34 million dollars
25 annually in property taxes.

1 In terms of employment, the Project is
2 estimated to generate 9,310 work years of onsite
3 employment. There will also be 3,100 work years of
4 off-site employment in Alberta. At peak, the
5 construction force will be 4,400 people. The
6 Project will also create 750 full-time jobs during
7 operations.

8 Many of these benefits will accrue
9 specifically to local Aboriginal communities. For
10 example, Shell has spent more than \$1 billion on
11 Aboriginal contractors and businesses in the
12 Athabasca Region in the last six years.

13 Finally, this Project will enhance Canada's
14 security of energy supply. Shell's expectation is
15 that global energy demand will double by 2050 from
16 2000 levels. To meet this growing demand, the
17 world will require all types of energies, including
18 biofuels, wind, nuclear, and fossil fuels. The oil
19 sands are an important part of this global energy
20 mix and will be used to meet Canada's domestic
21 energy needs as well as the needs of our export
22 markets.

23 This Project, together with other oil sands
24 development, will enhance Canada's role as an
25 emerging energy superpower.

1 In summary, Mr. Chairman, this Project is
2 needed to satisfy Shell's obligations to both its
3 shareholders and the people of Alberta, and it will
4 generate significant benefits for the region, the
5 province, and the country. The purpose of this
6 Project is to develop the Jackpine Mine Expansion
7 leases to realize the value of that resource,
8 investment that Shell has made to obtain the
9 leases, and to fulfill Shell's obligations under
10 its oil sands leases to the Province, and at the
11 same time, provide material economic benefits to
12 Canada's economy.

13 In terms of alternatives, Shell considered
14 alternatives to the Project in accordance with the
15 CEAA agency's OPS, which require that any
16 alternative must be capable of fulfilling the need
17 and purpose identified for the Project by the
18 Proponent. The OPS also confirms that the level of
19 detail on alternatives should reflect the
20 conceptual nature of the project at this stage of
21 the process.

22 Shell has investigated alternatives to
23 developing the Jackpine Mine Expansion resources
24 and has concluded that the Development Plan
25 described in this Application represents the most

1 practical, economical, and sustainable means of
2 extracting this resource. Currently, given the
3 local geology, there are no viable or realistic
4 alternatives to this Project such as in-situ
5 extraction, because the resource is too close to
6 the surface and mining is the only viable method of
7 extracting the bitumen.

8 Again, it is also important to bear in mind
9 that this is an expansion of an existing oil sands
10 mine and the Project will allow for the continuing
11 development of the resources underlying Shell's
12 leases in an integrated fashion promoting the
13 efficient development of the province's resources.

14 Since there were no viable alternatives to
15 the Project identified by Shell, Shell focused its
16 assessment on alternative means of carrying out the
17 Project, meaning the different types and placement
18 of facilities within the overall oil sands mining
19 scheme.

20 One of the primary alternative assessments
21 that was carried out was related to mining around
22 the Muskeg River.

23 In the 2007 EIA, Shell presented three
24 options:

25 Leave the river in place by only mining up to

1 it;

2 Divert the river through a pipeline;

3 Or divert the upper sections of the river
4 into Kearn Lake.

5 The pipeline diversion option was selected as
6 the preferred alternative among those three at the
7 time.

8 Through ongoing engagement with local
9 stakeholders and Aboriginal groups, it became clear
10 that diverting the Muskeg River through a pipeline
11 was considered unacceptable by most local
12 communities. Concerns were raised by several
13 Aboriginal groups that diverting the Muskeg River
14 through a pipeline would negatively impact the
15 spirit of the river and also navigability.
16 Concerns were also raised about water quality in
17 the river, particularly as a result of Shell's
18 original plan to flow the Muskeg River through end
19 pit lakes containing mature fine tailings
20 post-closure.

21 As a result of those discussions, Shell
22 reconsidered its options and it eventually put
23 forward the Muskeg River Diversion Alternative.
24 This alternative involves several modifications to
25 the Project at substantial cost, including

1 centrifugation of all mature fine tailings at the
2 end of mine life to eliminate tailings from the end
3 pit lakes which flow into the Muskeg River, and
4 construction of an open diversion channel instead
5 of a pipeline, including the sterilization of
6 approximately 27 million barrels of bitumen. While
7 that represents a significant cost to Alberta in
8 lost resource, it represents a reasonable balance
9 of economic, social and environmental issues in
10 Shell's view.

11 In terms of social impacts, the evidence
12 suggests that the upper reaches of the river that
13 flow through the Project lease have a low use by
14 Aboriginal groups. Therefore, Shell focused on
15 protecting the lower reaches of the river that were
16 considered part of the Aboriginal fishery. At the
17 same time, the Muskeg River Diversion Alternative
18 allows for continued access by watercraft along the
19 river, and addresses some of the issues around
20 losing the spirit of the river. In particular,
21 Shell's closest Aboriginal neighbour, Fort McKay,
22 has not objected to the proposal.

23 In terms of environmental issues, Shell's
24 analysis demonstrated that the diversion would
25 result in negligible to low effects on water

1 quality, aquatic health and fish habitat in the
2 Muskeg River. To the extent fish habitat will be
3 lost in the diversion, that habitat will be
4 compensated for through Shell's No Net Loss Plan.
5 Therefore, the assessment of the Muskeg River
6 Diversion Alternative resulted in the same overall
7 conclusion as the original EIA that there are no
8 likely significant adverse effects on the Muskeg
9 River due to the Project.

10 Finally, in terms of economic issues, the
11 diversion will eliminate sterilization of the
12 bitumen resources on Shell's leases. In the EIA,
13 Shell considered leaving the Muskeg River in place
14 and mining up to the south side of the river. That
15 option would sterilize 424 million barrels of
16 bitumen. Subsequent to submitting the EIA, Shell
17 considered the implications of mining within 200
18 metres on either side of the river. That scenario
19 introduced greater concerns about seepage losses
20 from the river due to mine pit dewatering, it also
21 would sterilize 172 million barrels of bitumen.

22 If Shell were only able to mine the south
23 side of the river, revised estimates based on
24 additional drilling information has suggested that
25 412 million barrels of bitumen would be sterilized.

1 In contrast, under the proposed diversion, only
2 about 27 million barrels of bitumen will be
3 sterilized.

4 Balancing environmental, social and economic
5 considerations, Shell determined that the Diversion
6 Alternative represented the best option for
7 managing the Muskeg River.

8 I would now like to address the key
9 environmental issues that were raised during the
10 hearing and in evidence, and I'll start with a
11 general discussion of assessment methodology. I'll
12 follow that with discussions of air quality,
13 greenhouse gases and climate change, water
14 management and water quality, fish and fish
15 habitat, human health, terrestrial issues including
16 wildlife, migratory birds and tailings ponds,
17 reclamation, wetlands and old-growth forest, and
18 finally cumulative effects.

19 I will then conclude this part of the
20 argument with a general discussion of uncertainty
21 in the assessment and responses to the Federal
22 Government's recommendations.

23 At the outset, I would like to point out that
24 a substantial portion of the evidence filed by the
25 Athabasca Chipewyan First Nation and the Oil Sands

1 Environmental Coalition reflected differences in
2 Environmental Assessment methodology between those
3 parties and Shell. For example, ACFN's Integrated
4 Knowledge and Land Use Report used different study
5 areas than Shell to assess Project effects and
6 determine significance based on effects to the most
7 sensitive land users, not the collective ACFN
8 community.

9 Similarly, many of the technical and expert
10 submissions from ACFN and OSEC contained critiques
11 of Shell's Assessment but failed to provide any
12 evidence to support a contrary position.

13 In Dr. Carver's own words: "I didn't do the
14 research. I'm looking at other people's research."

15 I will address the specific expert reports
16 later in my argument, Mr. Chairman, but it seems
17 clear that the primary debate is a difference of
18 opinion on assessment methodology. In that regard,
19 I'd suggest Shell took the correct approach.
20 Shell's EIA methodology was based on the Terms of
21 Reference for the Project, guidance from the CEAA
22 agency, methodologies recommended by the Cumulative
23 Effects Management Association, and standard
24 Environmental Assessment practices.

25 While some parties take issue with these

1 standard approaches, Shell's methodologies have
2 been widely accepted, are consistent with
3 regulatory guidance, and have been applied in
4 numerous project assessments throughout this
5 country. They have been tested through extensive
6 IRs over several years and as a result I submit
7 that Shell's EIA methodologies are reasonable and
8 appropriate in these circumstances.

9 Finally, I would also like to note that
10 several of the interveners' experts gave lengthy
11 presentations during the hearing summarizing their
12 written submissions, most of which critiqued
13 Shell's Assessment but failed to present any new
14 assessment of their own.

15 Mr. Chairman, if Shell and its experts had
16 given similar presentations for each of their areas
17 of expertise, we'd still be giving direct evidence.
18 That's how detailed the information is.

19 Let me turn to air quality. OSEC in
20 particular has focused on NO_x and SO₂ emissions from
21 the Project and has asserted that Shell has
22 forecast exceedances of air quality thresholds
23 established in the Lower Athabasca Regional Plan.
24 However, the LARP is clear, that for air emissions,
25 modelling results are to be used for regional

1 planning purposes and not for determining
2 exceedances. In addition, there are no predicted
3 exceedances of the LARP triggers due to the
4 Project. Shell's EIA concluded that for the
5 Application Case, the Project will actually reduce
6 SO₂ emissions by 0.1 percent and NO_x emissions by
7 0.2 percent.

8 As a result of changes to approved emissions
9 from the Jackpine Mine Phase I, SO₂ and NO_x
10 emissions from the Project will constitute less
11 than 1.0 percent of the region in total, in part
12 because the Project does not include an upgrader.
13 As a result, the EIA concluded that these emissions
14 from the Project would have a negligible to low
15 effect.

16 Environment Canada's Mr. Fox suggested that
17 air emissions from the Project's mine fleet may
18 have been underestimated without providing any
19 analysis to support that view. However, Shell's
20 evidence is that the assessment was both reasonable
21 and conservative; Shell assessed their mine-fleet
22 emissions based on the maximum year of emissions
23 over the life of the Project. For regional mine
24 fleets, the model assessed the maximum emissions
25 from each project and assumed that their emissions

1 were occurring simultaneously. As shown in
2 Figure 3.2-1 of Appendix 3.2 of Shell's May 2012
3 Submission, this approach results in a conservative
4 assessment of regional mine-fleet emissions. The
5 air quality model validation conducted for the EIA
6 concluded that NO₂ predictions near the mine sites
7 were overpredicted by a factor of two to three
8 times.

9 In addition, Shell's witnesses explained
10 during the hearing that it has been recognized that
11 NO₂ modelling in the region is overly conservative
12 and that work is currently underway by CEMA to
13 refine those models to reduce some of this
14 over-conservativism.

15 As a result, Shell submits that its
16 assessment of mine-fleet emissions was both
17 reasonable and conservative.

18 Shell recognizes, however, that maintaining
19 air quality in the Oil Sands Region is of critical
20 importance. And, as a result, Shell has committed
21 to several operational standards as part of its
22 project, including:

23 Committing to purchasing TIER-IV trucks for
24 the project fleet as soon as they are available;
25 monitoring truck idling with the goal of minimizing

1 emissions; implementing pit-stop practices to
2 minimize idling during shift changes; using
3 condition-based monitoring and maintenance rather
4 than time-based maintenance to ensure optimal fleet
5 performance; and ensuring that the cogeneration
6 units and boilers used for the Project meet the
7 best regulatory standards available.

8 Mr. Roberts explained during the hearing that
9 Shell is also working with equipment suppliers to
10 improve air emissions from new purchases. Shell is
11 the first oil sands operator actively considering
12 hybrid diesel shovels, and it is actively
13 investigating alternative fuels to diesel. Shell
14 is also an active participant in ongoing management
15 initiatives in the Oil Sands Region focused on
16 regional air quality. These initiatives include
17 monitoring through the Wood Buffalo Environmental
18 Association's Terrestrial Environmental Effects
19 Monitoring Program.

20 Shell is managing potential emissions from
21 its projects and is working with all of its
22 stakeholders to address this regional issue.

23 A related issue is acid deposition.
24 Dr. Schindler's critique suggested the EIA findings
25 associated with acid deposition are that 23 lakes

1 in the area already suffer from deposition of
2 acidifying sulphur and nitrogen compounds that
3 exceed their critical loads. This statement is
4 false.

5 First, the EIA shows that 18 lakes are
6 naturally below a pH of 6 in Pre-industrial
7 conditions, three additional lakes were predicted
8 to exceed critical loads in the Base Case, and two
9 will exceed those loads in the Planned Development
10 Case. The assessment conducted by Shell was
11 conservative and was consistent with regional
12 guidance. And it predicted that there will be
13 negligible acidification effects from the Project
14 on soil, vegetation and water receptors, and that
15 none of the 414 model lakes will become acidified
16 due to this Project.

17 Second, it is predicted exceedance of a
18 critical load does not mean lakes are suffering,
19 but rather, that monitoring should be conducted on
20 that lake as a precautionary measure.

21 Dr. Schindler's critique also quoted from
22 selected articles in a 2010 special issue of the
23 *Journal of Limnology*, but he ignored several key
24 findings in that issue. Those findings were
25 summarized by the editors of that special issue,

1 Aherne and Shaw, who wrote:

2

3 "The assessment of lakes in
4 northern Alberta using
5 macroinvertebrate,
6 paleolimnological and
7 hydrogeochemical modelling
8 approaches suggest that industrial
9 activities associated with the oil
10 sands presently have limited
11 influence on lakes."

12

13 Mr. Vandenberg explained that the narrative
14 provided by Dr. Schindler took quotes out of
15 context in order to make the case that damage has
16 occurred, when the authors of those papers were
17 clear in their conclusions that that is not the
18 case and that oil sands developments are having
19 limited if any effect on lake acidification.

20 Furthermore, Shell has designed the Project
21 to minimize acid-forming emissions and continues to
22 provide a leadership role in regional initiatives
23 addressing the issue. Shell supports CEMA's
24 Regional Acid Deposition Management Framework
25 designed by CEMA to prevent any damage from acid

1 deposition. Shell was directed by the Terms of
2 Reference to conduct the EIA in accordance with
3 this framework and Shell has committed to comply
4 with it.

5 The Acid Deposition Management Framework is
6 designed to ensure critical loads are not exceeded
7 in the region and industry will require to adapt
8 its plans as required to ensure the chemical
9 characteristics of regional soils and lakes are
10 protected.

11 CALPUFF model runs in 2010 by CEMA's Air
12 Working Group suggests that the region is currently
13 well below the framework's management criteria.
14 This is also reflected in WBEA's Annual Report
15 which shows very little change in the NO₂ levels in
16 the region since 1998 and shows all stations well
17 under the LARP thresholds. In fact, measured
18 concentrations at some stations have been
19 decreasing. Similarly, community receptors for SO₂
20 emissions are well below the LARP thresholds and
21 emissions have been declining due to installation
22 of flue-gas scrubbing at Suncor and Syncrude.

23 Again, Shell is doing its part to address
24 this regional issue and the Project will not result
25 in any significant adverse environmental effects.

1 So let me turn to greenhouse gases and
2 climate change. Another issue that OSEC has raised
3 in this proceeding relates to that issue. And,
4 Mr. Chairman, as we heard through the course of the
5 three weeks, it's a global issue. And Mr. Huat
6 from OSEC confirmed that in his testimony.

7 Shell is a leader in the oil sands industry
8 and is committed to using commercially viable
9 technologies, operating practices, training and
10 continuous improvement to reduce greenhouse gas
11 emissions from the Project towards an aspiration
12 goal of eventually reducing greenhouse gas
13 emissions from the oil sands to the same level as
14 the equivalent basket of imported crude into North
15 America. Mr. Huat agreed that Shell's existing oil
16 sands projects were on the leading edge of Oil
17 Sands Projects in terms of minimizing greenhouse
18 gas emissions.

19 Since greenhouse gas emissions and climate
20 change are global issues, the Project's greenhouse
21 gas emissions must be considered in that context.
22 Based on the information provided in Environment
23 Canada's latest Greenhouse Gas Emissions Trend
24 Report, Shell has estimated that this Project's
25 emissions will represent approximately 0.5 percent

1 of Alberta's emissions and 0.2 percent of Canada's
2 emissions. From a global perspective, the
3 Project's emissions will represent 0.004 percent;
4 in this context, the Project's greenhouse gas
5 emissions are clearly insignificant.

6 A similar conclusion was reached by the Royal
7 Society of Canada's expert panel who concluded that
8 oil sands emissions account for less than
9 0.1 percent of global greenhouse gas emissions and
10 that completely shutting down the oil sands
11 industry would have a minimal impact on global
12 greenhouse gas emissions. That doesn't mean it's
13 business as usual for Shell. Shell has recently
14 announced its intention to proceed with its Quest
15 carbon capture and storage project which will
16 capture more than one million tons of carbon
17 dioxide per year. Specific initiatives that Shell
18 has committed to for this Project to reduce
19 greenhouse gases include:

20 Designing facilities to be CO₂ capture ready
21 where practical and economically achievable;

22 Optimizing and continuously improving energy
23 efficiency in the design and operation of
24 processing facilities;

25 And applying best practices to minimize fuel

1 use for haul vehicles including regular maintenance
2 and computerized mine-fleet dispatch.

3 Shell will also comply with the requirements
4 of Alberta's Specified Gas Emitters Regulation, and
5 any future Federal regulatory requirements when
6 they are put in place.

7 The Federal Government testified that it has
8 already made significant progress on reducing
9 greenhouse gas emissions in the country and further
10 regulations are being developed.

11 The Panel should take comfort that the
12 government is continuing to address this issue and
13 that Shell is committed to being a part of the
14 solution to this global challenge.

15 In terms of climate change, Environment
16 Canada and ACFN have both expressed concerns with
17 Shell's methodology for predicting the future
18 effects of climate change and how those effects
19 will interact with the effects of the Project. In
20 particular, these parties have suggested that Shell
21 did not use the most up-to-date data for climate
22 change modelling in the EIA. While Shell
23 recognizes that climate change is real and is
24 likely to influence future operations and
25 environmental impacts, it also recognizes that

1 there is a lack of consensus around the approaches
2 to predicting and managing climate change. This is
3 evident in the lack of alignment in the review
4 documents provided by various interveners, and
5 multiple approaches compiled in the literature
6 review that Shell completed as part of their
7 climate change analysis.

8 Dr. Bonsal for Environment Canada agreed that
9 there is considerable uncertainty among the
10 different models.

11 Dr. Carver for ACFN also agreed with Shell's
12 conclusion on uncertainties associated with global
13 climate model outputs.

14 Hence, there is no single approach to this
15 issue that would satisfy all reviewers in the area.
16 In the absence of a standardized approach, Shell
17 has produced a reasonable and defensible set of
18 predictions that were used to assess the
19 uncertainty associated with climate change effects
20 on environmental impact predictions and has
21 outlined the resulting uncertainty on each
22 component of the EIA.

23 Shell's evidence is that the EIA used the
24 most up-to-date climate-change model inputs at the
25 time the assessment was completed and that its

1 climate scenarios remain realistic.

2 Shell's methodology is consistent with the
3 methods used by others to assess the uncertainty of
4 climate change on stream flows.

5 Shell also provided additional evidence that
6 the approach suggested by ACFN will yield similar
7 results to the results used by Shell in the EIA.

8 Dr. Biftu for Shell explained during the
9 hearing that based on ongoing work he has been
10 doing, even if updated data were used in the
11 assessment, the conclusions would not have changed.

12 While Shell has predicted long-term decreases
13 in river flows in the Athabasca River, other more
14 recent assessments have suggested that flows may
15 actually increase through higher levels of
16 precipitation in the future. For example, the
17 Royal Society of Canada's expert panel concluded
18 last month that increased precipitation will be
19 expected to cause increased flow rates in the
20 Athabasca River.

21 As a result, Shell's methodology for climate
22 change was conservative. If river flows actually
23 increase over time as a result of climate change or
24 decrease less than Shell's EIA predicted, the
25 cumulative effects in the region will be less than

1 has been assessed in the EIA.

2 In addition, Shell has demonstrated in its
3 evidence that it has the ability to adaptively
4 manage if climate change effects turn out to be
5 materially different than what Shell has predicted.
6 These issues would also be addressed through the
7 Phase 2 Framework for the Athabasca River, as well
8 as through other means such as water storage.

9 Therefore, Shell submits that its assessment
10 of climate change impacts is reasonable in these
11 circumstances and should be accepted by the Panel.

12 Mr. Chairman, let me turn to the issue of
13 water management, and in particular water
14 withdrawals from the Athabasca River.

15 ACFN has raised concerns regarding potential
16 effects due to water withdrawal from the Athabasca
17 River, particularly during low-flow periods. They
18 have suggested that at present there are times when
19 the flows in the Athabasca are too low to support
20 the exercise of ACFN Treaty Rights.

21 The Project will require additional water
22 withdrawals from the river. However, Shell has
23 planned this Project to reduce the amount of water
24 withdrawal from the river as much as possible
25 through capturing groundwater and surface water

1 runoff for use in the extraction process. Shell's
2 current plans for the Project include 30 days of
3 water storage onsite, although Shell will be able
4 to draw from additional sources of water onsite in
5 the event of prolonged periods of low flow on the
6 river.

7 In addition, Shell has committed to complying
8 with the Water Management Framework for the Lower
9 Athabasca River to ensure that water withdrawals
10 from the Athabasca are reduced as necessary during
11 low-flow conditions. Shell actively participated
12 in development of the original framework and the
13 currently recommended Phase 2 Framework. Through
14 that process, Shell has committed to reduce water
15 withdrawals to 0.2 cubic metres per second whenever
16 the total flows in the river reach 87 cubic metres
17 per second or less. The Phase 2 Framework will
18 also require Shell to construct additional onsite
19 storage.

20 In the context of total river flows, the
21 amount of water that Shell is proposing to withdraw
22 is less than 0.1 percent of the mean annual flow,
23 and ranging from 0.04 percent of average flows in
24 the summer to 0.3 percent average flows in the
25 winter.

1 To put that in context, the predicted change
2 in the Athabasca River water level is less than
3 1 millimetre, a change that would have no
4 discernible effect on the Athabasca River or the
5 Peace-Athabasca Delta.

6 ACFN's concerns are primarily regarding
7 cumulative effects on flow in the Athabasca River
8 and the Peace-Athabasca Delta. Mr. Makowecki for
9 DFO testified during the hearing that these issues
10 are cumulative issues and are not specific to any
11 one project. The cumulative effects on the
12 Peace-Athabasca Delta are influenced primarily by
13 historic changes in flow of the Peace River caused
14 by the Bennett Dam. Total allocation of the
15 Athabasca River is about 3.5 percent of total
16 annual average river flows with allocations for oil
17 sands mining projects accounting for 2.2 percent of
18 the total flow, and actual water usage of about
19 0.7 percent of the annual average river flow.
20 Nonetheless, ACFN and OSEC expressed concerns that
21 the current Water Management Framework and the
22 Phase 2 Framework recommendation do not adequately
23 consider Ecological Base Flow, EBF, or Aboriginal
24 Base Flow, which are the flows required for ongoing
25 navigation within the Athabasca River using

1 traditional and current means. Mr. Makowecki for
2 DFO explained that the development of the Phase 2
3 Framework recommendation did consider both the
4 development of an Ecological Base Flow and
5 navigability.

6 Ms. Vollema from Transport Canada also
7 testified that the Athabasca River was historically
8 dredged and that the river is now returning to its
9 pre-1940 levels. This likely explains the
10 increased occurrence of sandbars in the river that
11 ACFN members have raised concerns about.

12 Shell conducted a thorough cumulative effects
13 assessment to determine the cumulative effects of
14 the Project together with existing, approved and
15 planned oil sands developments on surface water
16 hydrology of the Athabasca River.

17 Shell also conducted a supplemental
18 assessment to look specifically at cumulative
19 effects on the Peace-Athabasca Delta. These
20 assessments were completed based on the current
21 Water Management Framework. Using this framework,
22 the results of the assessment indicated that the
23 predicted changes in water level for the Athabasca
24 River through the Planned Development Case will be
25 very small; less than 5 centimetres. If the

1 recommended Phase 2 Framework comes into effect,
2 there will be further restrictions on water
3 withdrawal from the Athabasca River which would
4 further reduce these cumulative effects.

5 Mr. Chairman, this assessment demonstrates
6 that the cumulative effects of the Project,
7 together with other existing and planned
8 developments on surface water hydrology in the
9 Athabasca River and the Peace-Athabasca Delta are
10 not significant.

11 Transport Canada similarly concluded that
12 significant adverse effects to navigation are not
13 anticipated from the Project.

14 Furthermore, these are issues that industry,
15 stakeholders and regulators have been actively
16 involved in managing, and the Water Management
17 Framework is designed to ensure that cumulative
18 water withdrawals by oil sands projects from the
19 Athabasca River do not significantly alter the
20 health of the river or the use of it.

21 These efforts are ongoing, and have
22 culminated in the recently recommended Phase 2
23 Framework which Shell has supported.

24 With respect to the Muskeg River, questions
25 arose regarding the status of the Muskeg River

1 Interim Framework for water quantity and quality
2 which was developed in 2008 to manage the quality
3 and quantity of the Muskeg River watershed. A
4 comprehensive framework to replace the Interim
5 Framework has not yet been put forth by ESRD given
6 the status of the development in the watershed.

7 But Shell has worked with ESRD on making the
8 Interim Framework operational and Shell is
9 committed to working with ESRD to develop the
10 comprehensive framework.

11 In addition, Shell has conducted a rigorous
12 assessment of effects of the Project on the lower
13 productive reaches of the Muskeg River and has
14 concluded that the integrity of the Muskeg River
15 will be maintained.

16 Mr. Makowecki for DFO agreed that the Muskeg
17 River will remain productive if this Project is
18 approved and that a comprehensive framework is not
19 required before the Project can proceed.

20 Therefore, while Shell is committed to
21 working with regulators to finalize a comprehensive
22 framework for the Muskeg River, this Project will
23 not compromise the integrity of the river and can
24 be approved in the absence of that final framework.

25 A final issue related to water management is

1 overburden dewatering and aquifer depressurization.

2 In order to safely mine the Project area, the
3 mine must first be dewatered. Overburden
4 dewatering will be accomplished through a
5 combination of shallow wells and ditching. If the
6 quality is suitable, this water will be discharged
7 to the environment, otherwise it will be retained
8 for use as process water.

9 Basal groundwater will, similarly, be removed
10 through depressurization wells which will be
11 progressively drilled as the mine advances. Basal
12 water from the depressurization wells will be used
13 as process water thus reducing the need for
14 withdrawals from the Athabasca River.

15 Development of the Project will also require
16 mining through upper parts of the Pleistocene
17 Channel Aquifer, or PCA, and managing seepage into
18 that aquifer. Shell's EIA considered the effects
19 of partial removal of the PCA, temporary drawdown,
20 and seepage from tailings disposal areas. Removal
21 of portions of the PCA was addressed by assessing
22 the effects of dewatering on the groundwater
23 receptors, such as reduced Base Flow to the Muskeg
24 River.

25 While the EIA concluded that there would be

1 reduced groundwater discharge into the Muskeg River
2 as a result of dewatering, the residual impacts
3 from the Project on the Muskeg River were
4 determined to be negligible. The effects of
5 temporary drawdown on the PCA were specifically
6 assessed in the EIA and the EIA concluded that the
7 PCA water levels will reestablish following
8 completion of dewatering activities.

9 Finally with respect to seepage of produced
10 water into the aquifer, the PCA and all other
11 groundwater sources were considered in terms of
12 project effects on water quality. And I'll discuss
13 this issue specifically in a few moments.

14 As a result, impacts on the PCA were included
15 in the EIA, and no significant impacts were
16 predicted. Shell will continue its efforts to
17 refine its understanding of the PCA, working
18 cooperatively with both Syncrude and Imperial Oil
19 to ensure proposed mitigation measures for the PCA
20 remain appropriate.

21 Next issue I'd like to discuss is water
22 quality.

23 OSEC and ACFN have both raised concerns about
24 water quality, and this was also the subject of
25 critiques filed by Dr. Schindler on behalf of OSEC

1 and Dr. Carver on behalf of the ACFN.

2 These parties have expressed concerns about
3 the level of mercury, PAHs, and other compounds in
4 the Muskeg River watershed that result from air
5 emissions and water emissions from oil sands
6 development in the region.

7 I addressed the issue of air emissions
8 earlier and again the evidence clearly shows that
9 the Project's air emissions will not result in any
10 measurable change to water quality in the region.

11 Dr. Schindler in particular seems unaware
12 that this Project and Shell's oil sands mines
13 generally have no upgraders. In terms of water
14 emissions, Shell is committed to capture runoff and
15 groundwater that comes into contact with the
16 Project area and to reuse it. Shell will also
17 divert streams around the Project area to reduce
18 the potential for project effects. Shell is
19 committed to maintaining water quality in the
20 Muskeg River in compliance with the Interim
21 Management Framework for the Muskeg River and the
22 comprehensive framework once it is developed.
23 Shell will also comply with the cumulative water
24 quality limits for the Athabasca River under LARP.

25 To address seepage from its external tailings

1 disposal areas, Shell has proposed mitigation
2 measures that have already been applied
3 successfully at its existing oil sands mines,
4 including internal drains to relieve pressure in
5 the pond, collecting water from these drains in a
6 perimeter ditch, and recycling that water back into
7 the process.

8 Shell will also use collection wells around
9 the perimeter of the tailings pond to collect
10 seepage that would otherwise flow into surface
11 aquifers. Again, water will be captured and
12 returned back to the process for reuse.

13 Groundwater monitoring will be in place prior
14 to operation of the Project to establish baseline
15 conditions and will allow of informed mitigation
16 for any seepage that may occur. It is important to
17 note that seepage moves very slowly underground.
18 This allows for ample opportunity to detect losses
19 and formulate mitigation plans to effectively
20 control that seepage. Given the mitigation that
21 Shell has successfully used at its other oil sands
22 mines, and its ability to adaptively manage, Shell
23 has demonstrated that it can adequately control any
24 seepage that may occur from its tailings ponds.

25 Finally, post-closure, Shell has designed the

1 closure landscape to preferentially drain toward
2 construction wetlands and pit lakes which will
3 provide active, or passive water treatment, I
4 should say, to ensure water quality in local
5 streams is consistently protected. Shell will
6 closely monitor the performance of these treatment
7 facilities and no water will be released into the
8 environment until the water quality meets accepted
9 standards.

10 Shell's EIA conservatively predicts water
11 quality will be acceptable within 15 years of mine
12 closure.

13 As a result of these proposed mitigation
14 measures, the EIA predicted that the Project will
15 have negligible effects on water quality in the
16 Athabasca River and the Muskeg River, with no
17 significant effects on fish, fish health, or human
18 health.

19 The models that were used to reach these
20 predictions were also used for the Muskeg River
21 Mine Expansion and have been verified and provide a
22 conservative estimate of what the water quality
23 will be.

24 In terms of cumulative effects on water
25 quality, Shell has presented evidence that existing

1 and approved projects are predicted to have low to
2 negligible effects on key water quality
3 constituents, including acute and chronic toxicity,
4 labile naphthenic acids, total dissolved solids,
5 and tainting potential in receiving watercourses
6 and waterbodies. Shell's evidence is that existing
7 and proposed mitigation measures will ensure that
8 acute and chronic toxicity and tainting potential
9 will be at levels appreciably lower than the
10 corresponding threshold values.

11 With respect to effects on the
12 Peace-Athabasca Delta, Shell's assessment concluded
13 that there would be negligible effects on the delta
14 with respect to flows, water levels, water quality,
15 sediment quality, and air quality. The findings of
16 independent studies, that were published after the
17 May 2012 Submission, support these conclusions.

18 Shell's conclusions on water quality were
19 challenged by Dr. Schindler, particularly with
20 respect to mercury and PAHs. Dr. Schindler claims
21 that mercury concentrations in predatory fish of
22 the Athabasca River and delta have been elevated
23 for years, that recent studies show increased
24 mercury deposition in snow near oil sands
25 developments, and that a study by Harris et al. in

1 2007 shows that mercury when added to a lake is
2 detectible in fish within months.

3 According to Dr. Schindler, this demonstrates
4 that oil sands operations are aggravating an
5 already serious problem.

6 But there are two main problems with
7 Dr. Schindler's critique.

8 First, Dr. Schindler ignored the recent
9 finding by Evans and Talbot that found clear
10 downward trends in mercury concentrations in fish
11 tissue in the region.

12 Second, and perhaps most important,
13 Dr. Schindler failed to relay a key finding from
14 the 2007 Harris study he relied on. That finding
15 was that 99, 99 percent of the mercury that was
16 applied to the environment was retained by the
17 watershed and did not contribute to changes in fish
18 or water mercury concentrations.

19 A comparison of the findings from Harris et
20 al. study against Shell's Aerial Deposition Study
21 for the Project, indicates that Shell's modelling
22 assessment is highly conservative because that
23 assessment assumed that nearly all
24 aerially-deposited metals would reach the aquatic
25 receptors.

1 Given that the Project will have nearly
2 negligible emissions of metals, and this has been
3 confirmed for Shell's existing projects in the
4 National Pollutant Release Inventory data that has
5 been reported by the government, this is an
6 important aspect of the conservatism in Shell's
7 assessment.

8 Dr. Schindler also took issue with the EIA
9 finding that regarding polycyclical aromatic
10 hydrocarbons, or PAHs, the EIA assessed potential
11 PAH effects through multiple pathways and analysis.
12 One pathway examined aerial deposition to waters,
13 which was conducted in 2012 specifically in
14 response to Dr. Schindler's 2009 and 2010 papers
15 with Kelly et al.

16 This assessment was ignored by Dr. Schindler.
17 That's a surprising omission considering
18 Mr. Vandenberg has been e-mailing Dr. Schindler
19 over the past two years in an effort to collaborate
20 on this topic and share the data. Given
21 Dr. Schindler's emphasis on transparency and data
22 provision and sharing, his silence in this
23 situation is somewhat surprising.

24 Another PAH pathway that Shell assessed was
25 deposition in the Lower Athabasca River and the

1 delta sediments through aqueous and aerial
2 pathways.

3 In his critique on this topic, Dr. Schindler
4 relied on two studies, one by Kurek et al, which is
5 not publicly available, and the other, Timoney and
6 Lee, which has been strongly criticized by the
7 Royal Society of Canada's expert panel.
8 Dr. Schindler ignored the Hall et al. paper,
9 described by Mr. Vandenberg, which stated that:

10

11 "Thus, despite rapid growth
12 of oil sands development during the
13 past 25 years, the data reveal no
14 measurable increase in
15 concentration or proportion of
16 river-transported
17 bitumen-associated indicator PACs."

18

19 Another definition for PAHs. And:

20

21 "Results also reveal no
22 evidence that industrial activity
23 has contributed measurably to the
24 sedimentary concentration of PACs
25 supplied by long-range atmospheric

1 transport and deposition in the
2 vicinity of the PAD as was also
3 found for key metals of concern."

4

5 In his testimony, Dr. Schindler dismissed the
6 Hall study and said that a yet-to-be-released
7 report based on federal monitoring trumps that
8 study.

9 While the recently released abstract for the
10 federal study confirms that aerial deposition does
11 occur in the region near the oil sands, witnesses
12 for the Federal Government characterized the
13 federal study as representing preliminary results
14 that have not yet been vetted, and they also
15 confirmed that the Hall study and the recently
16 announced federal study are not directly
17 comparable.

18 The federal studies do not change the
19 conclusions by Hall et al. that natural sources
20 comprise the majority of PAHs being deposited in
21 the delta and that deposition has not increased in
22 recent decades despite an increase in oil sands
23 development.

24 Finally, Dr. Schindler has repeatedly stated
25 that upgraders are the primary source of aerial

1 deposition of PAHs and mercury to snowpack. And
2 Shell supports continued efforts by the joint
3 Alberta-Canada Monitoring Program to verify whether
4 in fact this claim is accurate. However, Shell is
5 not applying for an upgrader as part of the
6 Jackpine Mine Expansion Project.

7 A related issue that attracted considerable
8 attention during the hearings was end pit lakes,
9 and particularly, concern that there is a lack of
10 certainty that end pit lakes will effectively treat
11 process-affected waters that are directed towards
12 those lakes post-closure.

13 Shell's evidence demonstrates, I would
14 submit, that there is a high degree of confidence
15 around the effectiveness of its end pit lakes based
16 on the following:

17 The basic fundamental principles of
18 hydrology, limnology, and water treatment, are all
19 standard practice;

20 The conservative models that have been used
21 by Shell in its assessment;

22 The findings from both CONRAD and CEMA;

23 Research on wetlands, experimental ponds and
24 pit lakes;

25 Experience with pit lakes and other mining

1 industries that demonstrate pit lakes can be used
2 successfully;

3 The mitigation and contingency options that
4 are available in the event that the current plans
5 are unsuccessful;

6 And the fact that considerable research
7 continues to be carried out and Shell will not be
8 completing its end pit lakes for several decades.

9 Shell also filed a recent report from CEMA
10 that provides a range of adaptive management
11 options to address potential future risks
12 associated with end pit lakes. This document
13 provides guidance for mine planners on how best to
14 plan, design, monitor, assess and adapt end pit
15 lakes in the oil sands, and it outlines a number of
16 technical considerations and key milestones that
17 can be used to verify that each pit lake is on a
18 trajectory towards self-sustainability.

19 This document also provides a number of
20 mitigation options to consider in the event that
21 the pit lake is not following the anticipated
22 trajectory. These options will be refined through
23 the life of the Project as end pit lake plans
24 continue to be optimized.

25 While there is some uncertainty associated

1 with end pit lakes, the predominant uncertainty
2 relates to the rate of biodegradation of initial
3 constituents in the pit lake and the input from
4 placed tailings deposits. Therefore, the
5 uncertainty is essentially one of time, first how
6 long it will take for the pit lake water to retain
7 a quality such that the lake outflow can be
8 released to the natural watershed, and second, the
9 time for the lake to achieve a sustained state of
10 productivity from the growth of natural flora and
11 fauna in support of fish habitat.

12 Therefore, the main question is when, not if,
13 end pit lakes will work. Shell has predicted that
14 the end pit lakes will contain acceptable water
15 quality that is suitable for discharge to the
16 receiving environment in 2065, 16 years after mine
17 closure, and will be capable of supporting fish and
18 other aquatic organisms within two to three decades
19 after that.

20 Shell will be responsible for all tailings
21 and reclamation liabilities associated with the
22 operation of the Project. This future obligation
23 is guaranteed through the Province's recently
24 updated Mine Financial Security Program.

25 Dr. Miller on behalf of OSEC presented a

1 report specifically on the uncertainties associated
2 with end pit lakes. That report however was based
3 on a number of inaccuracies, including:

4 A belief that Shell's end pit lakes will
5 contain mature fine tails and will be meromictic;

6 That Shell did not consider seepage into the
7 lakes from end pit and external tailings disposal
8 facilities;

9 And that Shell did not consider the
10 cumulative impact of multiple pit lakes on the
11 landscape in terms of water quality, wildlife, and
12 human health.

13 All of those beliefs were wrong.

14 And Shell explained these inaccuracies in its
15 October 15th Reply Submission. And Dr. Miller
16 conceded many of those in his testimony.

17 Dr. Miller admitted to having only read
18 portions of the EIA and having no experience with
19 end pit lakes in the oil sands context. Dr. Miller
20 himself conceded that the oil sands are distinctly
21 different from the hard-rock mining operations that
22 he has experience with. Dr. Miller's testimony and
23 evidence were to rely from experience with
24 hard-rock mining where acid drainage and metal
25 leaching are consequences of concern. The oil

1 sands tailings contaminants of primary concern are
2 organic molecules originating in the bitumen that,
3 when in solution in process-affected water,
4 biodegrade over time.

5 As a result, the Panel should afford
6 Dr. Miller's report limited weight and should rely
7 on the assessment conducted by Shell's
8 environmental consultant that Dr. Miller
9 characterized as "a very good analysis of pit lake
10 dynamics."

11 Similarly, Dr. Schindler recommends no
12 further approvals of end pit lakes until monitoring
13 is put in place at several existing pit lakes in
14 order to confirm that end pit lakes are working.
15 However, Shell is participating in the Syncrude
16 Base Mine Lake Project which is presently gathering
17 the data that will be required to demonstrate the
18 efficacy of end pit lakes.

19 In addition, Dr. Schindler conceded that he
20 hadn't actually reviewed the data on end pit lakes
21 from Syncrude's research program.

22 OSEC also raised concerns that Shell has not
23 conducted detailed assessments of alternative water
24 treatment options in the event the end pit lakes do
25 not work as intended. However, Shell has put

1 forward a plan for end pit lakes that is based on
2 sound scientific and engineering principles, and
3 monitoring will be carried out to verify these
4 predictions and determine whether additional or
5 alternative treatment options may be required.

6 The CEMA guidance document shows that there
7 are a variety of adaptive management measures that
8 can be put in place if necessary. Shell has a high
9 degree of confidence in the overall functioning of
10 end pit lakes and there is considerable time
11 available to implement adaptive management in
12 accordance with the CEMA guidance if monitoring
13 indicates that alternative water treatment is
14 necessary.

15 On the issue of effects on fish and fish
16 habitat, Shell has developed a No Net Loss Plan
17 which describes the options Shell plans to
18 implement to achieve the necessary compensation for
19 expected losses in habitat area due to the Project.
20 The No Net Loss Plan was developed with
21 consideration of the No Net Loss guiding principle
22 for fish habitat, pursuant to seeking approval from
23 Fisheries and Oceans Canada for the Project under
24 the **Fisheries Act**. Shell considered eight
25 different alternatives for fish habitat

1 compensation but ultimately chose the construction
2 of a compensation lake at the Big Creek and Redclay
3 Creek drainages on the west side of the Athabasca
4 River as the preferred option. This option
5 provides flexibility in size of the lake, would not
6 require ore sterilization, and was determined to
7 have the least disturbance footprint per hectare of
8 lake created.

9 Its location will also provide good fish
10 passage, good outlet maintenance flows, and natural
11 fish colonization of the lake.

12 Shell held meetings with Aboriginal groups to
13 provide information about Shell's proposed
14 compensation lake and to understand any concerns
15 they may have with it. Several groups, including
16 ACFN, conducted reviews of the No Net Loss Plan and
17 submitted those reviews to Shell. Shell responded
18 to each of those reviews and incorporated the
19 concerns into the updated Draft No Net Loss Plan
20 which was filed in September.

21 The Draft No Net Loss Plan has been designed
22 to provide new fish habitat that will cumulatively
23 have a level of productive capacity equal to or
24 greater than the habitats affected by the Project.
25 Overall, a net gain in the productive capacity of

1 available fish habitat is predicted as a result of
2 the Project. Based on this proposed habitat
3 compensation, there are no predicted adverse
4 impacts on fish habitat due to changes in habitat
5 area resulting from the Project.

6 Mr. Makowecki for DFO testified that he has
7 "a high level of confidence in the success of this
8 fish habitat compensation plan."

9 In terms of effects on fish themselves, the
10 fish community within the direct Project footprint
11 is comprised of relatively few resident fish
12 species. And the upper Muskeg River, generally
13 does not provide habitat for migratory species from
14 the Athabasca River. The Muskeg River diversion
15 channel will maintain connectivity and fish passage
16 and will function to support the upper Muskeg River
17 fish community during operations. As a result,
18 fish abundance and diversity in the lower reaches
19 of the Muskeg River will be maintained.
20 Post-closure, the aquatic habitat reclaimed within
21 the closure landscape will further support local
22 fish populations in the long-term.

23 As a result, taking into account the
24 mitigation that Shell is proposing, including the
25 Muskeg River diversion channel and the No Net Loss

1 Plan, the EIA concluded that the residual effects
2 of the Project on fish were negligible.

3 Dr. Schindler's report expresses concern
4 about cumulative impacts to the fish community in
5 the upper Muskeg River since the 1970s. These
6 findings are not supported by other studies of the
7 river and Shell's EIA that show fish communities in
8 the upper reaches of the Muskeg River today are
9 comparable to the fish communities that existed in
10 the 1970s.

11 To support this position, Dr. Schindler
12 quoted a 1979 study by Bond and Machniak to
13 demonstrate that damage to fish in the Muskeg River
14 is understated and that Shell erred in concluding
15 that there were never arctic grayling in the upper
16 reaches of the Muskeg River.

17 In fact, Bond and Machniak themselves stated
18 that grayling were never observed in the Muskeg
19 River upstream of Hartley Creek which is downstream
20 of the Project.

21 The RAMP data presented in the EIA and in
22 Dr. Schindler's presentation do show declines in
23 arctic grayling numbers in the Muskeg River and
24 this was acknowledged in the EIA. However,
25 declines in arctic grayling have been documented

1 throughout Alberta and prior to major oil sands
2 development within this watershed. The Bond and
3 Machniak study referenced by Dr. Schindler actually
4 supports the conclusions in the EIA and the Draft
5 No Net Loss Plan that the species distribution
6 within the upper Muskeg River at the location of
7 the Project is primarily restricted to a few
8 resident species and is largely not used by the
9 migratory fish species from the Athabasca River.

10 Dr. Schindler's report also states that the
11 benthic invertebrate community of the Muskeg River
12 has been in "catastrophic decline," in his words.
13 Dr. Schindler quotes from a 1979 study by Barton
14 and Wallace that there was a diverse community of
15 benthic macro-invertebrates in the Muskeg River in
16 1979 that Dr. Schindler now believes has been lost.
17 Dr. Schindler claimed that these data were ignored
18 by the EIA. These assertions are wrong.

19 Dr. Schindler ignored data from RAMP
20 presented in their 2011 Technical Report which
21 clearly show a consistent presence of these species
22 in the lower reach of the Muskeg River.

23 Mr. Vandenberg explained that the 1979 Barton
24 and Wallace study is simply not comparable with
25 more recent studies, having collected their

1 information at sites far downstream of the upper
2 reaches of the river and such a comparison cannot
3 be used to support a loss of invertebrate taxa.

4 Finally in terms of data inclusion in the
5 EIA. The EIA in fact examined additional sources
6 of historical data not considered by Dr. Schindler
7 and added a specific sampling site for examining
8 the benthic macro-invertebrate community within the
9 Project footprint.

10 The damage to benthic invertebrates in the
11 Muskeg River suggested by Dr. Schindler is simply
12 not supported by the evidence. Dr. Schindler
13 simply did not bother to read the EIA and the
14 appendices. If he had done so, these facts would
15 have been obvious to him.

16 Finally, Dr. Jones on behalf of the ACFN
17 filed a report on fish health in the Athabasca
18 River that was generally supportive of Shell's
19 conclusions. The report concluded that:

20
21 "There is no statistical
22 evidence, from the morphometric
23 data, of consistent health impacts
24 on species, site or seasonal
25 basis."

1

2

And:

3

4

"There do not, at this time,

5

appear to be any frank health

6

effects of the fish exposed to

7

contaminates."

8

9

The report also concludes, however, that in

10

general this data supports the hypothesis that

11

contaminants from oil sands operations are reaching

12

the aquatic food webs of the Slave and Athabasca

13

Rivers. As Shell explained in its October 15th

14

Reply Submission, the conclusion that contaminants

15

from oil sands operations are entering the aquatic

16

food chain is not supported by the evidence.

17

Researchers have been unable to determine the

18

proportions of PAHs in the Athabasca River that are

19

natural versus anthropogenic in origin, although

20

recent studies indicate that the majority of PAHs

21

are from natural sources, which supports the EIA

22

findings.

23

Dr. Jones agreed during the hearing that his

24

study could not distinguish between natural and

25

anthropogenic PAHs in fish tissue, so there is no

1 basis for his conclusion that any observed
2 increases in fish PAH are related to oil sands
3 operations.

4 Finally, Mr. Lambrecht asked questions during
5 the hearing about Shell's proposed compensation
6 lake and whether Shell could ensure that fish
7 exposed to methylmercury in the early years of the
8 compensation lake's operation would be prevented
9 from entering the Athabasca River.

10 Mr. Kovach for Shell explained that Shell has
11 mitigation plans to ensure that humans and wildlife
12 do not consume fish with elevated mercury levels.
13 This mitigation will remove the higher
14 trophic-level fish from the lake so that any fish
15 remaining will have lower levels of mercury. Given
16 Shell's experience with its existing Jackpine Mine
17 compensation lake and the extensive monitoring plan
18 that Shell plans to carry out, Shell is confident
19 that it will be able to manage any methylmercury
20 issues at the lake.

21 However, Shell has also committed to working
22 with regulators, like Alberta Environment and
23 Sustainable Resource Development, and Fisheries and
24 Oceans Canada, to implement additional safeguards
25 if monitoring determines them to be necessary.

1 This brings me to human health, which is
2 another concern that has been raised in the
3 hearing. OSEC and ACFN have both expressed
4 concerns about potential loss of access to and the
5 contamination of traditional food and water
6 quality, and the associated psychological stress
7 this can cause, and elevated health risk at Fort
8 Chipewyan.

9 Let me start with a quote from the Royal
10 Society of Canada's expert panel 2010 Report, which
11 stated the following about health effects in Fort
12 Chipewyan, and I quote (as read):

13
14 "Timoney and Lee 2009, and
15 Kelly et al. 2009, both referred to
16 the controversy in Fort Chipewyan
17 concerning apparent elevated cancer
18 rates by noting that PAH are known
19 carcinogens. These references to
20 PAH-related cancer risk, even
21 nuanced as they are, are
22 unfortunate because results from
23 neither study provide any evidence
24 to support a human cancer risk from
25 measured PAHs.

1 While valid concerns about
2 effects on aquatic organisms from
3 observed PAH concentrations are
4 raised, any extrapolation to, or
5 speculation about, human cancer
6 risk is unsupported by any of the
7 available toxicological evidence on
8 PAH. Such speculation in the
9 absence of credible quantitative
10 evidence does not serve to
11 accurately inform downstream
12 residents and seems likely to
13 create fear."

14
15 The paper that the Royal Society experts were
16 responding to was co-authored by Dr. Schindler.
17 Not surprisingly, Dr. Schindler took issue with the
18 Royal Society statement during his testimony and
19 claimed that he had communicated with the community
20 of Fort Chipewyan to explain that contaminants were
21 getting into the river but the assessment of
22 dissolved contaminants in the water showed that
23 current levels did not pose a health risk. He
24 claimed that this information would have actually
25 allayed the fears of the community, although the

1 testimony of Chief Adam was clear, that the
2 community still believes that human health is being
3 affected by water contamination.

4 In this proceeding, Dr. Schindler has made
5 similar conclusions about water quality, acid
6 deposition, and reclamation. This information has
7 led to unfortunate perceptions among local
8 residents that are not supported by the facts.

9 Mr. Chairman, experts should use facts, not
10 fear, to communicate with the public.
11 Dr. Schindler's assertions are, quite frankly,
12 suspect given his history and the rhetoric in his
13 critiques. Dr. Schindler's claims that
14 environmental exposures and the potential
15 implications to public health, despite
16 Dr. Schindler's claims, environmental exposure and
17 potential implications to public health have been
18 closely monitored in the oil sands.

19 Mr. Koppe's testimony discussed a number of
20 community health studies that have been conducted
21 since 2000, all of which have shown no adverse
22 health effects caused by oil sands development.

23 Further investigations into concerns related
24 to health are planned for the communities of Fort
25 McKay and Fort Chipewyan to ensure that oil sands

1 operations are not causing any adverse health
2 effects in those communities.

3 For the Project, Shell has conducted a Human
4 Health Risk Assessment which used extensive
5 baseline data and took information on cumulative
6 air emissions and water discharges and looked at
7 different ways that people could be exposed to
8 chemicals of potential concern. It then looked at
9 the risk to the health of the most sensitive local
10 receptors from all possible routes of exposure.

11 What is concluded was that Project emissions
12 alone or in combination with other regional sources
13 are not anticipated to result in a noticeable
14 increase in health risks in the Oil Sands Region.
15 In addition, existing air quality, water quality,
16 and food quality, are not associated with negative
17 health effects and environmental health risks are
18 expected to remain low over time.

19 I should note that this Health Risk
20 Assessment was a quantitative exercise which
21 followed the prescribed approach that has been
22 developed by regulatory agencies across the globe.

23 Put simply, Mr. Chairman, emissions from this
24 Project are expected to have a negligible impact on
25 human health. That conclusion will be verified

1 through a comprehensive monitoring program. Shell
2 will also continue to support regional monitoring
3 efforts like the Wood Buffalo Environmental
4 Association, the Regional Aquatics Monitoring
5 Program, the Alberta Biodiversity Monitoring
6 Institute, and now the joint Canada-Alberta
7 Implementing Plan for oil sands monitoring.

8 In its October 15th Reply Submissions, Shell
9 submitted that it is difficult to assess perception
10 issues in the EIA and Health Risk Assessment
11 process as these assessments use a quantitative
12 assessment methodology. However, this is an issue
13 that can be addressed through public consultation
14 and information, ongoing ambient monitoring, and
15 the regular provision of information results to
16 stakeholders during Project operations and closure
17 phases. Shell has committed to each of these
18 measures.

19 It is also served by fact-based discussions
20 instead of rhetoric-fuelled media events.

21 Let me move on to terrestrial environment and
22 specifically effects on wildlife. This is another
23 topic that attracted considerable attention in the
24 hearing and in the submissions leading up to it.

25 In their October 1st submission, ACFN

1 submitted that historically important subsistence
2 species such as woodland bison and woodland caribou
3 are at dangerously low levels and are scarcely
4 available for traditional resource use throughout
5 the region and that the regional landscape is
6 changing in ways that may lead to the disappearance
7 of wildlife species, including caribou, bison and
8 moose, and to the invasion by other species,
9 including deer, magpies, and invasive plants.

10 Similarly, OSEC's October 1st submission
11 claimed that the Project will have significant
12 adverse effects on 13 of 22 species at risk and
13 valued wildlife species. OSEC relies on the CEMA
14 Terrestrial Ecosystem Management Framework, or
15 TEMF, and claims that the Planned Development Case
16 set out in the EIA for the Project will exceed the
17 threshold in TEMF for intensive use of the Regional
18 Municipality of Wood Buffalo.

19 There are several problems with OSEC's
20 submission in this regard.

21 First, it relies almost entirely on changes
22 from the Pre-Industrial Case, which considers all
23 development that has ever occurred in the RSA, to
24 the Planned Development Case, which presents a
25 future-looking scenario that includes projects that

1 may or may not occur in the region.

2 These planned projects will be subject to
3 their own regulatory process and public-interest
4 decision should they proceed to that stage in their
5 development. While the Planned Development Case
6 and comparisons to Pre-Industrial Case may provide
7 useful information for regional planning purposes,
8 they are not useful to determine a project's
9 effects.

10 Similarly, the issue of disturbance
11 thresholds on the regional landscape is a matter of
12 government policy on regional or regional land use
13 planning, not the subject of a project-specific
14 review.

15 The basic regional planning document in the
16 Oil Sands Region is the Fort McMurray Athabasca
17 Subregional Integrated Resource Plan, or IRP.
18 That's been mentioned by OSEC and has been recently
19 approved in the LARP.

20 The Project is located within the IRP's
21 Mildred-Kearl Lake Resource Management Area. The
22 management intent for that area is, I quote (as
23 read):

24

25

"To promote the orderly

1 planning, exploration and
2 development of resources with
3 emphasis on the area's oil sands
4 reserves."

5

6 This is the only stated management intent for
7 the area.

8 There is no balancing mentioned.

9 OSEC has relied on TEMF but TEMF was not
10 adopted by the government and the government has
11 instead focussed on the LARP, which was finalized
12 this fall. While the biodiversity framework under
13 LARP will not be finalized until next year, the
14 LARP explicitly recognizes that one of the primary
15 goals for the region should be to optimize the
16 economic potential of the oil sands resource.
17 Mr. Chairman, and Panel Members, it is perfectly
18 acceptable land-use planning to designate certain
19 areas like the Mildred-Kearl Lake area for
20 development, and others such as the Richardson
21 Backcountry, for complete protection. That's good
22 land-use planning.

23 Even the TEMF itself contemplates that energy
24 development will remain a regional priority and a
25 dominant driver of land use in the region and that

1 the achievement of all goals found in TEMF will not
2 be possible on all landscapes in the region
3 simultaneously.

4 OSEC has relied on the Natural Range of
5 Variability threshold for the region, or NRV, that
6 was established under TEMF, but the TEMF explicitly
7 states that in some areas of the region, indicators
8 will be far outside NRV while in other areas they
9 would be within NRV. The TEMF was intended as a
10 strategic document and was explicitly not designed
11 for species at risk.

12 In addition, although OSEC suggests that the
13 Planned Development Case presented in the EIA for
14 the Project exceeds the TEMF threshold for
15 intensive use in the region, Shell's evidence is
16 that the estimated area of intensive use in the
17 region is only about 8.0 percent, which is below
18 the threshold.

19 Finally, the Panel should make its decision
20 on the Project based on the likely effects of the
21 Project itself, not based on what might happen in
22 the future. Any recommendations in relation to the
23 Planned Development Case should be to governments
24 and regulators for planning and management
25 purposes.

1 Dr. Komers for the ACFN filed a report
2 claiming that by 2042 there would be no undisturbed
3 areas left within ACFN's self-defined Regional
4 Study Area. This was based on his assumption that
5 wildlife would completely avoid all areas within
6 250 metres of an industrial disturbance, including
7 seismic lines.

8 In other words, Dr. Komers assumed that there
9 are half-kilometre-wide buffers around every
10 seismic line in the region within which there is no
11 effective wildlife habitat. These corridors are
12 much wider than many of the major pipeline
13 corridors in the country.

14 In cross-examination, Dr. Komers could not
15 identify any literature or research to suggest that
16 wildlife completely avoid any disturbance feature.
17 In fact, he relied in part on a paper written by
18 Mr. Dyer from OSEC that showed caribou, which are
19 particularly sensitive to industrial disturbance,
20 actually prefer some areas within 250 metres of
21 seismic lines.

22 Dr. Komers also did not consider that large
23 portions of the ACFN RSA were conservation areas
24 and parks. Rather, Dr. Komers took the historical
25 rate of disturbance in the region and applied that

1 as a constant into the future without any
2 consideration of external factors.

3 What he did was he took two numbers, he
4 multiplied them together without any analysis or
5 thought. What that proves is that Dr. Komers knows
6 how to do math. It does not present any reasonable
7 prediction of cumulative effects in the region and
8 its conclusions defy both logic and commonsense.

9 Shell's witnesses explained at the hearing
10 that literature suggests wildlife will treat
11 different types of disturbance differently, and
12 there is no complete loss of habitat within zones
13 of influence. This was the approach that was used
14 in the EIA and reflects a realistic and thoughtful
15 analysis of what the effects are likely to be of
16 the Project.

17 Turning specifically to effects on wildlife,
18 Shell's EIA focused on three types of effects to
19 determine ecological consequences: Habitat loss;
20 wildlife movement; and wildlife abundance. This
21 assessment concluded that the environmental
22 consequences of habitat loss during construction
23 and operations are high at the LSA scale for all
24 affected species to closure. The Project is also
25 expected to result in indirect habitat loss through

1 sensory disturbance and surficial aquifer drawdown.
2 While species like the yellow rail, rusty blackbird
3 and horned grebe will experience net losses of
4 habitat due to the loss in wetlands, particularly
5 peatlands, species including black bears, Canada
6 lynx, beavers, and the Canada warbler, will benefit
7 from the large increases in productive forests and
8 associated terrestrial uplands that develop after
9 reclamation.

10 At the local scale, habitat loss for the
11 Project will have a high environmental consequence
12 for several species that rely on wetlands,
13 including yellow rail. However, for those species,
14 the best available information suggests that
15 species abundance is not limited by habitat in
16 northeast Alberta. An ABMI report recently
17 concluded that songbird species-at-risk habitat in
18 the Oil Sands Region is 89 percent intact. In
19 addition, there will be abundant alternative
20 habitat in the region for these species. Wetlands
21 comprise approximately 39.8 percent of the total
22 region at Base Case and the Project will only
23 reduce that number to 39.3 percent. Therefore,
24 wetlands will remain abundant in the Regional Study
25 Area and wildlife that depend on wetlands will have

1 extensive alternative habitat available for them.

2 As a result, the EIA concluded that habitat
3 loss from the Project is not likely to affect the
4 viability of the regional populations of any
5 wildlife species.

6 In terms of wildlife movement, the Project
7 will have an adverse effect on wildlife movement,
8 but wildlife movement around the Project footprint
9 is expected to be sufficient to maintain genetic
10 connectivity in the RSA. This conclusion will be
11 verified through Shell's commitment to monitor the
12 presence, relative abundance, and distribution of
13 wildlife in the Project area, and its involvement
14 in regional monitoring initiatives, such as the
15 Wildlife Habitat Effectiveness and Corridor Program
16 Technical Committee under CONRAD which conducts
17 regional-scale wildlife monitoring to examine
18 movement patterns and inform decisions regarding
19 appropriate setback distances and corridor widths
20 for wildlife along project boundaries and adjacent
21 to rivers.

22 For wildlife abundance, the EIA concluded
23 that direct mortality for wildlife as a result of
24 site clearing, interactions with Project
25 infrastructure, and Project vehicles, removal of

1 nuisance wildlife, and sensory disturbance, will
2 have a negligible-to-low-magnitude effect after
3 mitigation measures have been implemented.

4 The measures include the relocation program
5 that Shell has committed to for the western toad.
6 There will be no effects on site clearing on
7 species like black-throated green warbler and
8 yellow rail because clearing will occur during the
9 winter when these species are not present.

10 As a result, the EIA concluded that the
11 effects of the Project on wildlife abundance would
12 be low to negligible for all indicated species.

13 Significance of adverse ecological
14 consequences was determined by examining the
15 ecological context within which the ecological
16 consequences occur. In accordance with guidance
17 from the Canadian Environmental Assessment Agency,
18 the ecological context includes the concept of
19 resiliency. "Resilience" refers to the ability of
20 ecological systems to absorb disturbance and
21 maintain system integrity and function. For the
22 purposes of Shell's Wildlife Assessment, cumulative
23 effects to wildlife were considered to be
24 significant if they compromise resilience such that
25 the populations are likely no longer to be

1 self-sustaining.

2 Ecological effective populations. Using the
3 concept of ecological context to ascertain the
4 significance of project and cumulative effects
5 requires that the assessment of significance be
6 considered at a scale beyond the Local Study Area,
7 because the environmental consequences at the local
8 scale are for the most part de facto high.

9 The CEAA agency's guidance is clear that it
10 is important to evaluate significance in
11 consideration of other than just local direct
12 effects. Therefore, Shell's assessment considered
13 the effects on wildlife indicators and species at
14 risk at the scale of the Regional Study Area.

15 The Joint Review Panel for the Joslyn North
16 Mine Project stated that, as a result of the
17 **Species at Risk Act**, the **Alberta Wildlife Act**, and
18 the **Migratory Bird Convention Act**, and I quote (as
19 read):

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21 "The measure for determining
22 significant adverse effects should
23 be any net harm to an individual of
24 a species, its resident, or its
25 critical habitat."

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Mr. Wiacek reiterated this position in his testimony during the hearing. With respect, Shell disagrees. Using this definition, fetters the discretion of Panels to actually consider the evidence before it and determine objectively what the impacts of a project are. At law, this is incorrect. Perhaps more importantly, it also ignores the application of ecological consequence and resilience when determining the significance of adverse effects, which the CEAA agency recommends, and is also contrary to standard environmental assessment practices.

If significance were always to be determined at the local scale, any new development would have significant effects. This would be nonsensical. As suggested by the agency, the significance of environmental effects should be based on the following criteria: Direction, magnitude, geographic extent, duration, reversibility, frequency, and ecological context. This was the approach taken by Shell.

Based on a combination of effects on habitat loss, wildlife movement, and wildlife abundance, followed by an examination of the ecological

1 context in which the ecological consequences of the
2 Project would occur, the EIA concluded that the
3 effects of the Project on wildlife are not likely
4 to be significant.

5 OSEC has argued that a 20 percent decline in
6 habitat for any one species is an ecological
7 threshold that should be equivalent to a
8 significant adverse impact. This is the basis for
9 OSEC's claim that cumulative effects will be
10 significant for 13 of 22 species at risk and valued
11 wildlife species, even though the habitat loss
12 numbers that OSEC uses for this calculation are
13 from Shell's assessment of cumulative effects from
14 the Pre-Industrial Case to the Planned Development
15 Case, and are thus not specific to the Project. In
16 addition, despite OSEC's earlier submission that
17 this 20 percent limit was an ecological threshold,
18 OSEC conceded during the hearing that the
19 20-percent threshold was more of a social-economic
20 threshold and was somewhat of a value judgment in
21 terms of what proportion of wildlife habitat
22 Albertans and Canadians are willing to lose.

23 Mr. Dyer explained that this threshold was
24 not based on any ecological criteria suggesting
25 catastrophic decline but was more akin to a

1 socio-economic threshold like a speed limit.

2 The literature suggests that using 20 percent
3 habitat loss as a threshold is highly conservative.
4 For example, in Swift and Hannon's review regarding
5 critical thresholds for a number of taxa, the
6 authors concluded that although evidence was
7 limited, most empirical thresholds fell in the
8 range of 10 to 30 percent remaining habitat, or
9 disturbance of 70 to 90 percent. Similarly,
10 Romprey et al. concluded that, for species with
11 large home ranges, such as birds, thresholds are
12 generally between 30 and 40 percent of habitat
13 still remaining, or disturbance of 60 to
14 70 percent.

15 Another study, Betz et al. studied songbird
16 habitat and concluded that landscape thresholds
17 ranged from 8.6 to 28.7 percent habitat remaining,
18 or disturbance of roughly 70 to 90 percent of the
19 habitat.

20 Nevertheless, Shell's EIA did use the
21 conservative value of 20 percent habitat loss as an
22 indicator of high-magnitude habitat loss. That
23 does not mean, however, that 20 percent habitat
24 loss is necessarily a significant adverse effect.
25 The determination of significance was based on the

1 combination of all aspects of the assessment and
2 wildlife ecology and not just the amount of habitat
3 lost or remaining. If a certain species is not
4 habitat limited, for example, 20 percent habitat
5 loss will likely not be significant adverse effect
6 for that species. Again, this approach is
7 consistent with guidance from the CEAA agency which
8 is that significance determination should be
9 determined on several criteria, which I've outlined
10 already.

11 Environment Canada endorsed this approach to
12 determining significance as well. It also reflects
13 that the Panel's decision should be based on fact
14 and analysis and not arbitrarily-imposed numbers.

15 Although Environment Canada agreed with the
16 overall approach Shell used, Mr. Wiacek
17 misinterpreted how the approach to determining
18 significance was applied. Mr. Wiacek interpreted
19 Shell's methodology as meaning that if a species is
20 extirpated over the long-term within the Regional
21 Study Area, the effect will not be significant if
22 the Project has no contribution to the overall
23 resilience of that population at either the
24 provincial or national scale. He went on to state
25 that Shell did not assess significance

1 appropriately because Shell expanded the area that
2 was considered to the provincial and national
3 scale. That interpretation is not correct.

4 Shell's approach is that if a species is
5 declining in Alberta or across its North American
6 range, but the cause of the decline is not
7 associated with the Project or cumulative effects
8 within the RSA, the cumulative effects assessment
9 would conclude that the effects within the RSA are
10 not in fact significant. This approach is
11 appropriate because it focusses on the effects
12 within the RSA that may act cumulatively with the
13 effects of the Project.

14 With respect to ACFN's concerns around wood
15 bison, caribou and moose, ACFN claims that the
16 opportunity for bison recovery is dwindling with
17 the increasing disturbance of bison habitat. That
18 assertion is not supported by the facts. ACFN's
19 own expert, Dr. Komers, agreed with Shell that
20 bison are not habitat-limited in northeast Alberta.
21 Disease has been one of the reasons for historic
22 population declines.

23 In addition, at present, some wood bison
24 populations in the region are actually increasing.
25 For example, Mr. Wiacek for Environment Canada

1 testified that between 2001 and 2012, wood bison
2 populations in Wood Buffalo National Park have
3 increased approximately threefold.

4 Finally, the EIA concluded that the Project
5 will have negligible effects on wood bison because
6 wood bison do not occur on the east side of the
7 Athabasca River where the mine will be located.

8 Woodland caribou are also virtually absent
9 from the Project LSA and the Project is located
10 many kilometres from the nearest caribou herd
11 range. Shell concluded that the Project will have
12 negligible effects on caribou. Shell acknowledges
13 that caribou are declining in the Regional Study
14 Area as a result of indirect cumulative effects of
15 development, including issues such as predation.

16 However, the regional decline in caribou
17 populations is part of a national trend for many
18 caribou herds and that has led to the recent
19 release of the Federal Recovery Strategy for
20 Woodland Caribou. This Recovery Strategy requires
21 the provinces to develop range plans for each
22 non-sustaining caribou herd to ensure long-term
23 recovery of woodland caribou across Canada.

24 Shell continues to support these and other
25 caribou initiatives in the Oil Sands Region,

1 including through bodies such as the Oil Sands
2 Leadership Initiative and COSIA.

3 For moose, population levels in the Regional
4 Study Area are affected by a number of factors,
5 including habitat, predation, access, and hunting.
6 Although moose populations in the region are likely
7 to be declining, there is nothing to suggest that
8 the primary cause of this decline is habitat loss
9 as habitat quality and availability assessment
10 suggests that moose populations remain well below
11 the carrying capacity of the environment.

12 Shell's witnesses explained during the
13 hearing that the primary cause of moose decline in
14 the region are likely hunting and predation, which
15 will be unaffected by the Project.

16 As a result, the EIA concluded that the
17 likely impacts of the Project on moose abundance,
18 habitat, and movement, after closure and
19 reclamation in the RSA will either be low or
20 negligible. Similarly, the cumulative effects of
21 effect of development on moose are not considered
22 to be likely significant adverse effects.

23 Finally, counsel for the CEAA agency also
24 raised questions about effects of the Project on
25 yellow rail and conservation offsets.

1 Mr. Jalkotzy explained that declines in yellow rail
2 populations across North America are largely due to
3 wetland losses in the prairie region further south.
4 In addition, there is a substantial amount of
5 yellow rail habitat available in the Regional Study
6 Area outside of the Project footprint and therefore
7 yellow rail will have extensive alternative habitat
8 for them.

9 As a result, the Project was predicted to
10 have negligible effects on the yellow rail within
11 the RSA.

12 In terms of conservation offsets, the
13 witnesses explained that the Project itself is not
14 likely to result in any significant adverse effects
15 and therefore project-specific offsets are not
16 necessary. On a regional basis, cumulative effects
17 should be addressed by all industry and government
18 through regional planning initiatives like LARP.
19 The Province is in fact taking steps to address
20 these cumulative effects through conservation areas
21 under LARP which expanded conservation areas from
22 6 percent of the region to 24 percent of the
23 region.

24 Developing a biodiversity framework for the
25 region and a Land Disturbance Plan by the end of

1 2013, both of which are likely to be in place
2 before Shell's proposed start-up of the Project,
3 and also the Province's Wetlands Policy, will also
4 address this issue.

5 In it's October 1st submission, Environment
6 Canada referenced its operational framework for use
7 of conservation allowances. At page 6 of that
8 document, Environment Canada states this, and I
9 quote (as read):

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"Another jurisdiction may
have established a conservation or
land-use plan that adequately
addresses the proposed impact. The
measures put in place by the other
jurisdiction would need to be
reviewed carefully to ensure that
Environment Canada's allowance
criteria are addressed. For
example, a province or a regional
land-use plan may contemplate
expected land or resource-use
activities and set aside protected
areas ahead of time in anticipation
of the adverse environmental

1 impacts associated with these
2 expected activities. In this case,
3 the protected area could function
4 as a habitat bank from which future
5 allowances could be obtained."

6
7 The Alberta Government is managing the Oil
8 Sands Region and has identified through the LARP
9 areas where development can occur and areas that
10 are required to be protected. Based on Environment
11 Canada's document, the Panel can rely on these
12 conservation areas as compensating for habitat loss
13 from this and other projects in the region.

14 Mr. Chairman, I'm not sure when you wanted to
15 break, but this is a logical spot.

16 THE CHAIRMAN: It's just right, sir. I have
17 10:20. We'll break for 20 minutes.

18

19 **(The morning adjournment)**

20

21 THE CHAIRMAN: Ladies and Gentlemen, the
22 Reporter advises me that when the subject matter is
23 as dense as it is in final argument, we need to
24 take a break about every hour, so I'll ask for the
25 cooperation of counsel in watching the clock and

1 trying to find a natural break to do that.

2 So I have about 10:42. So we'll look at it
3 in an hour and see if we want to take our lunch
4 break then, depending on where you are,
5 Mr. Denstedt.

6 MR. DENSTEDT: Mr. Chairman, I'm exactly
7 halfway through, and I was thinking I could split
8 the last half of the argument in two pieces, and if
9 we could do that before lunch, my friends would
10 then have the lunch hour to think about what I've
11 said as well. Does that make sense?

12 THE CHAIRMAN: Excellent.

13 MR. DENSTEDT: Shall I start?

14 So where we left off was at migratory birds
15 and tailings ponds, which is the next issue that I
16 wanted to talk about. And several interveners,
17 including ACFN, raised concerns about migratory
18 birds and tailings ponds. For example,
19 Ms. Hechtenthal submitted an Avian Hazard Report on
20 behalf of ACFN that raised concerns with birds
21 becoming oiled in tailings ponds and the
22 effectiveness of mitigation measures to address
23 that concern.

24 The effects of tailings ponds on waterfowl
25 and other migratory birds was assessed explicitly

1 in the EIA as well as in Shell's 2012, May 2012 and
2 September 7, 2012 submissions to the JRP. This
3 assessment relied on experience with existing oil
4 sands tailings ponds for which comprehensive
5 monitoring programs are in place to detect bird
6 mortalities.

7 At Shell's existing operations, for example,
8 Mr. Martindale explained that each tailings pond is
9 monitored every day specifically for bird
10 mortalities, amounting to thousands of person hours
11 every year, and all detected mortalities are
12 reported to the government.

13 To deter birds from landing on its tailings
14 ponds, Shell uses an on-demand radar-activated
15 deterrent system that is an improved modification
16 from current industry practices. The system also
17 fails on; that means that if the system goes down,
18 the cannons will continue to operate based on
19 stored solar power.

20 The bird-deterrent system has been highly
21 effective in preventing waterfowl from landing on
22 Shell's tailings ponds.

23 In addition, Shell continues to work with
24 other industry members to improve bird-deterrent
25 technology and will continue to implement new

1 measures that are found to be more effective.

2 According to the 2011 Annual Report of the
3 Regional Bird Monitoring Program for the Oil Sands
4 Region, the total number of birds recovered from
5 all the tailings ponds in the Oil Sands Region in
6 2011 was 70, with most of them being ducks. At
7 Shell's tailings ponds, the total was 15. In
8 contrast, wind turbines kill hundreds of thousands
9 of birds each year, and Ducks Unlimited members
10 hunt tens of millions. Eco Justice and Earth
11 Justice submitted that between 22 million and 170
12 million birds breed in the Oil Sands Region.

13 Ms. Song for Environment Canada estimated
14 that the boreal forest region supports between 12
15 and 14 million waterfowl and that the main sources
16 of bird mortality are residential buildings and
17 cats.

18 While any bird mortalities are clearly
19 unfortunate, and Shell is working to prevent all
20 bird mortalities through its bird-deterrent system,
21 the number of bird mortalities that can be expected
22 for the Project are clearly insignificant in this
23 broader context.

24 Ms. Hechtenthal claims that it is highly
25 likely that industry reports do not account for all

1 avian deaths because oiled and waterlogged birds
2 sink out of the view quickly and likely go
3 undocumented.

4 However, Shell explained in its Reply
5 Submission in October that the number of bird
6 mortalities reported by industry is not
7 underreported, because any birds that become
8 waterlogged and sink will ultimately gasify and
9 float to the surface as they decompose.

10 Therefore, Shell concluded it is unlikely
11 that waterfowl mortalities occur on tailings ponds
12 that are not recorded and reported.

13 A further specific issue that was raised by
14 Environment Canada relates to the whooping crane.

15 Shell's witnesses explained during the
16 hearing that despite extensive surveys over the
17 last 20 years, there have been very few sightings
18 of whooping crane in the Oil Sands Region. While
19 recent radio-tracking data shows that whooping
20 crane migrate over the oil sands, it also shows
21 that whooping crane have avoided existing oil sands
22 tailings ponds. This is likely due to the fact
23 that whooping crane prefer to rest in fens that are
24 very different habitats from tailings ponds, as
25 well as the effectiveness of bird-deterrent systems

1 that oil sands operators have in place.

2 Let me move on to reclamation.

3 ACFN's expert Dr. Gutsell suggested that
4 reclamation simply does not work. Similarly,
5 Dr. Schindler on behalf of OSEC submitted that
6 reclamation to a landscape of equivalent habitat is
7 not possible. Mr. Chairman, those statements do
8 not rely on reality. The reclamation requirement
9 in Alberta is not to create a landscape that is
10 identical to the pre-disturbed state, as
11 Dr. Gutsell seemed to suggest, the goal is to
12 reestablish a functional landscape that provides
13 equivalent land capability.

14 It also considers the decisions of
15 locally-affected stakeholders, and in particular
16 Aboriginal groups, who will be using the reclaimed
17 landscape post-closure.

18 Returning the reclaimed landscape to
19 equivalent capability is not only possible but it
20 has been done or is in progress at a number of
21 sites in the Oil Sands Region, including tailings
22 ponds.

23 In addition, there are a variety of examples
24 around the world and in Canada of mine reclamation
25 being successful. Successful reclamation is not

1 new to this province.

2 Oil sands reclamation has been the focus of
3 considerable research through CEMA, CONRAD, and
4 other bodies, and Shell is an active supporter of
5 that work. There is a large volume of research on
6 the subject of boreal reclamation with particular
7 emphasis on reclamation in the Oil Sands Region and
8 it shows that reclamation in the oil sands can be
9 effective; wildlife are returning to these
10 reclaimed sites.

11 As a result, the Royal Society of Canada's
12 expert panel report concluded that functional
13 upland landscapes in the oil sands can be reclaimed
14 using current reclamation technologies.

15 In addition, CEMA's Guidelines for
16 Reclamation in the Athabasca Oil Sands Region
17 provide more than 400 pages of information about
18 reclamation techniques and monitoring results in
19 the region and are among the most comprehensive in
20 any industry. This was a document that ACFN's
21 expert, Dr. Gutsell, completely ignored in her
22 report without comment. It seems to be a
23 fundamental fallacy to ignore the actual
24 reclamation guidelines used by developers while at
25 the same time criticizing their efforts.

1 Vegetation, succession, and ecosystem
2 development, is a long process under natural
3 conditions and the same is true for reclamation
4 sites. Studies have shown the ingress of native
5 species onto these sites and continued research has
6 indicated other techniques such as woody-debris
7 placement can be used to enhance reclamation
8 diversity and ecosystem functionality. It is
9 expected that over time, emergent properties such
10 as biodiversity, structural complexity, and
11 microbiotic activity, will continue to develop on
12 the reclaimed landscape.

13 Shell has shown a commitment to progressive
14 landscape at Muskeg River Mine and Jackpine Mine by
15 maximizing areas of permanent and temporary
16 reclamation on areas completed by operations and
17 available for reclamation activities. Although
18 some interveners have pointed to the lack of
19 reclamation that Shell has achieved to date on its
20 existing oil sands mines, the reclamation process
21 takes many years, and reclamation cannot be started
22 until operations in a specific area are completed;
23 which for long-life production projects such as
24 Shell's, can be decades.

25 Shell's Oil Sands Projects are still in the

1 early phases of development.

2 Mr. Martindale testified that Shell is
3 already doing as much as possible towards
4 progressive reclamation. Shell is required to
5 report to the Alberta Government on an annual basis
6 and to meet with them to discuss Shell's
7 Reclamation Plans and demonstrate that they line up
8 with industry standards.

9 Shell is also required to comply with the
10 Province's Mine Financial Security Program, which
11 ensures that sufficient funds are secured in
12 advance to cover the costs of reclamation.

13 In addition, if Shell or any other operator
14 fails to meet its progressive reclamation targets
15 as set out in its plans, there are serious
16 penalties imposed upon them.

17 Shell has filed Preliminary Closure Drainage
18 and Closure Conservation and Reclamation Plans for
19 the Project, which are based on the CEMA guidance
20 and the requirements of ESRD. The Closure Drainage
21 Plan explains how both groundwater and surface
22 water will be managed and integrated into the
23 surrounding landscape through features like
24 sand-caps, closure channels, constructed wetlands,
25 and pit lakes. These closure landscape features

1 have been designed geomorphically to act like
2 natural systems that are capable of managing
3 anticipated flux of process-affected groundwater
4 and a range of runoff flow conditions.

5 In addition, the end pit lakes have been
6 configured and appropriately sized in consideration
7 of a number of factors, including hydrologic
8 sustainability, flood attenuation, water-treatment
9 capability, littoral-zone development, and
10 shoreline protection.

11 For terrestrial reclamation, Shell determined
12 that direct placement of subsoil and topsoil on a
13 newly-prepared landscape is a preferred method of
14 reclamation as it can take advantage of an active
15 and viable seed bank in the soil. It reduces the
16 amount of land required for soil storage and it
17 allows operations to handle the material only once.
18 After the plants and seeds in the topsoil have
19 germinated and established, the site will be
20 evaluated and additional trees and shrubs may be
21 planted in order to achieve the ecosites described
22 in Shell's Reclamation and Closure Plan. The
23 success of this type of terrestrial reclamation has
24 been well documented in the literature.

25 Shell's Closure Drainage and Closure

1 Conservation and Reclamation Plans for the Project
2 will be updated regularly taking into account
3 knowledge gained from ongoing reclamation research
4 being undertaken by Shell in groups like CEMA's
5 Reclamation Working Group, Canadian Oil Sands
6 Network for Research and Development, the Oil Sands
7 Tailings Consortium, and now Canada's Oil Sands
8 Innovation Alliance. These plans will also
9 incorporate input from Aboriginal communities
10 through bodies such as the Shell Fort McKay
11 Reclamation Focus Group.

12 Shell has also committed to developing a
13 biodiversity monitoring program to monitor the
14 success of reclamation and establishment of
15 biodiversity for the Project. This monitoring
16 program will consider protocols established by the
17 Alberta Biodiversity Monitoring Institute, which
18 Mr. Dyer for OSEC has called "world class,"
19 including protocols for winter track counts,
20 breeding-birds surveys, vegetation surveys, and
21 incidental wildlife observations. It will also
22 comply with the Biodiversity Framework under LARP
23 which is expected to be released next year.

24 This monitoring will determine the
25 effectiveness of reclamation, and based on the

1 results of this monitoring, and any subsequent
2 adaptive management, Shell will ensure that the
3 reclaimed landscape is returned to an equivalent
4 landscape capability post-closure.

5 Another issue that was raised by OSEC in the
6 hearing was the effects of the Project on wetlands
7 and old-growth forest.

8 Shell recognized the Project will have an
9 adverse effect on wetlands, direct and indirect
10 effects of the Project will affect the majority of
11 the wetlands within the Local Study Area. This
12 will have high environmental consequences at the
13 local scale. At the regional level, however,
14 effects of the Project on wetlands will be
15 negligible. In the Base Case, wetlands comprise
16 approximately 39.8 percent of the total Regional
17 Study Area, and the Project will reduce that number
18 to 39.5 percent, a change of 0.3 percent. All
19 developments in the Planned Development Case will
20 reduce this number by a further 2.0 percent.

21 However, wetlands, including peatlands, will
22 remain abundant in the Regional Study Area, and
23 wildlife that depend on wetlands and peatlands will
24 have extensive alternative habitat available for
25 them. Shell's Reclamation Plans also include large

1 constructed wetlands that will provide a number of
2 important functions in the closure landscape,
3 including habitat provision, run-off flow
4 attenuation, biodegradation, and sediment capture.

5 As a result, Shell concluded that the Project
6 will not have significant adverse effects on
7 wetlands or peatlands in the RSA.

8 While Shell's EIA conservatively assumes
9 peatlands will not be recreated on the site, Shell
10 is currently providing funding and participating in
11 studies spearheaded by Syncrude and Suncor to
12 construct peatlands on reclaimed mine areas.

13 Dr. Schindler in his testimony dismissed the
14 Vitt et al. research as not applicable because it
15 was conducted in the Peace River country and
16 focused on reclamation of well-sites and therefore
17 could not be applied to reclamation of mined lands.

18 However, the first question posed by those
19 researchers was this: "Will locally available
20 peatland vascular plants establish on wet compact
21 mineral soils?" Wet mineral soils will be used for
22 reclamation of the mine areas. The results of the
23 work are directly applicable to reclamation on the
24 Project lands, contrary to Dr. Schindler's
25 assertions.

1 Shell has also partnered with Wetlands
2 International and Ducks Unlimited Canada to develop
3 its reclamation strategy, and Shell continues to
4 actively participate in research activities of
5 CEMA's Wetlands and Aquatics Group and CONRAD's
6 Environmental Research Group. These efforts will
7 supplement the government's regional planning,
8 initiatives such as LARP, to ensure that the region
9 retains viable healthy ecosystems.

10 In that regard, Shell is committed to comply
11 with both the pending Biodiversity Framework being
12 developed under the LARP, and the Alberta Wetlands
13 Policy, once they are released.

14 In terms of effects on old-growth forest, the
15 Project is expected to result in the clearing of
16 approximately 390 hectares of old-growth forest.
17 This represents about 40 percent of the old-growth
18 forest in the Local Study Area, but approximately
19 only 0.1 percent of old-growth forest in the RSA.
20 Given the very small percentage of old-growth that
21 this Project will affect within the RSA, the EIA
22 concluded that the Project's effects on old-growth
23 forests will not be significant.

24 Ms. Campbell for OSEC suggested that since
25 the post-closure landscape in the LSA will be dryer

1 than at present, it will be more prone to forest
2 fires and will thus not likely support old-growth
3 forest in the future.

4 When these types of questions were put to the
5 Shell witnesses, however, they testified that the
6 Project area will support the return of old-growth
7 in the future and the LSA will not necessarily be
8 more prone to forest fires.

9 As I discussed earlier, climate-change models
10 for the region produce a variety of predictions,
11 some say it will be warmer and drier, others say it
12 will be warmer and wetter. If the climate becomes
13 wetter, the frequency of fire will likely decrease.

14 Given the uncertainty regarding the effects
15 of climate change on precipitation, Shell simulated
16 forest fire using model inputs from modelling
17 constructed for the LARP, which represents the best
18 available knowledge at this time.

19 Next I would like to talk about cumulative
20 effects, which, in Shell's view, is the most
21 important management and policy issue in the Oil
22 Sands Region. I've already touched on this issue
23 to a certain extent, but let me start by saying
24 that Shell conducted a cumulative effects
25 assessment in accordance with the requirements of

1 the CEAA and the guidance documents published by
2 the Canadian Environmental Assessment Agency.

3 These documents require that all
4 Environmental Assessments conducted under the CEAA
5 consider the likely effects of the proposed project
6 that overlap with the effects of other projects in
7 the area that have been, or will be, carried out.

8 The Joint Review Panel for the Express
9 Pipelines project set out a three-part test for
10 assessing cumulative effects under the CEAA, and
11 that panel stated as follows: And I quote (as
12 read):

13
14 "First, there must be an
15 environmental effect of the project
16 being assessed.

17 Second, that environmental
18 effect must be demonstrated to
19 operate cumulatively with the
20 environmental effects from other
21 projects or activities.

22 And third, it must be known
23 that the other projects or
24 activities have been or will be
25 carried out and are not

1 hypothetical."

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Therefore, in order for there to be cumulative effects under the CEAA, there must be overlap between the effects of the proposed project and other activities. If there is no overlap, there is no cumulative effect for the purposes of CEAA. Secondly, there must be some certainty that a future activity will in fact be carried out for it to be considered in the cumulative effects assessment.

The Panel for Express Pipelines described this as (as read):

"Some probability rather than the near possibility that the cumulative environmental effect will occur."

In addition, CEAA agency guidance states as follows, and I quote (as read):

"When the details for future projects, e.g. design, technology, mitigation measures, are unknown,

1 or the information is not
2 accessible, it adds to the
3 uncertainty about the environmental
4 effects of future projects and how
5 these effects will interact with
6 those of the project in question.
7 Available information and the best
8 professional knowledge and judgment
9 should be used. In most cases,
10 only qualitative assessments of
11 cumulative environmental effects
12 will be possible."

13

14 In terms of activities that are induced by
15 planned projects, like access roads, the CEAA
16 agency's guidance is that consideration of induced
17 actions should be done only if there is sufficient
18 information describing them to allow an adequate
19 assessment of their effects.

20 So let's turn to Shell's evidence.

21 So Shell's witnesses explained during the
22 hearing that future activities, like seismic
23 exploration, were not included in the Planned
24 Development Case because there is no information
25 about these activities today. We don't know when,

1 where, or how these activities will be undertaken.
2 Therefore, there is no ability to predict with any
3 degree of certainty what their environmental
4 effects may be in the future. However, for other
5 future activities, like announced in-situ projects
6 where there was insufficient information about the
7 project, Shell conservatively assumed that the
8 entire lease for the in-situ Project would be
9 disturbed. As that will clearly not be the case
10 for in-situ projects, Shell's approach
11 conservatively overestimates disturbance from these
12 types of projects.

13 Mr. Dyer for OSEC acknowledged that Shell's
14 Planned Development Case was both conservative and
15 reasonable.

16 The cumulative effects assessment that was
17 undertaken for the Project followed the
18 requirements of CEAA.

19 First, the environmental effects of the
20 Project were assessed.

21 Second, Regional Study Areas, or RSAs, were
22 developed that were considered by
23 discipline-specific experts to be the areas in
24 which the effects of the projects could overlap
25 with the effects of other activities in a

1 non-trivial way.

2 Finally, the effects of the Project were
3 considered in combination with the effects of other
4 projects or activities within the RSA that were
5 either existing or planned future activities.

6 At the request of the Panel, Shell assessed
7 cumulative effects from a Pre-Industrial baseline
8 and updated its Planned Development Case to include
9 all projects that had been announced as of
10 September 2011. Shell's EIA indicates that there
11 will be no significant adverse effects to species
12 at risk or Key Indicator Resources with the
13 exception of cumulative effects to woodland caribou
14 and the black-throated green warbler.

15 As the Project contributes 0.4 percent to the
16 cumulative habitat loss for black-throated green
17 warbler and its populations are predicted to
18 recover following reclamation, the Project's
19 environmental consequences at the RSA scale are
20 anticipated to be negligible.

21 Similarly, as woodland caribou are virtually
22 absent from the Project area, and the nearest
23 designated caribou range is several kilometres
24 away, negligible effects due to the Project are
25 anticipated.

1 Shell acknowledges that the PDC information
2 it has filed demonstrates that cumulative effects
3 in the Oil Sands Region must be planned for to
4 ensure that ecological thresholds are not surpassed
5 in the future, and that if left unmanaged,
6 cumulative effects may become significant. This
7 information, however, should not be used to suggest
8 that the Project is not in the public interest
9 simply because other activities may or may not
10 occur in the future.

11 Rather, this information is useful for the
12 purposes of informing regional planning and policy
13 development by regulators and government such as
14 LARP and the Panel should make the appropriate
15 recommendations to those bodies to consider Shell's
16 information in their planning and management
17 activities.

18 Industry is also working with stakeholders,
19 governments, and Aboriginal groups, to address
20 cumulative effects in the Oil Sands Region. The
21 Cumulative Effects Management Association was
22 created to bring together a range of these
23 interests to assess regional cumulative effects and
24 to make recommendations on how future projects
25 should proceed.

1 Shell has been an active participant of CEMA
2 since its inception in 2000, as noted by Mr. Dyer
3 for OSEC, and has continued to maintain a strong
4 leadership position. The LARP is also intended to
5 address regional concerns through setting regional
6 objectives and quantifiable targets and setting
7 aside new conservation areas. In Shell's views,
8 these are the appropriate forums to address and
9 manage cumulative effects across the oil sands, and
10 CEMA is in fact taking steps to address these
11 issues.

12 Shell will continue to support cumulative
13 effects focused management frameworks, including
14 those developed through LARP and the
15 Federal/Provincial Joint Monitoring Program.

16 The next issue I would like to discuss is
17 uncertainty.

18 During the hearing, Panel Member Cooke asked
19 the Shell witnesses questions about uncertainty
20 around several issues in the EIA and how those
21 uncertainties will be managed.

22 Uncertainty is inherent in any Environmental
23 Assessment. In its Operational Policy Statement on
24 Adaptive Management, the CEAA agency states as
25 follows, and I quote (as read):

1

2

"Due to factors such as the

3

complexities of ecosystems and

4

difficulties predicting details of

5

future development, all

6

Environmental Assessments involve

7

some level of uncertainty regarding

8

the identification of environmental

9

effects, the assessment of their

10

significance, and the effectiveness

11

of mitigation measures. The

12

Canadian Environmental Assessment

13

Act implicitly recognizes

14

uncertainty by requiring a

15

follow-up program for all projects

16

that undergo an assessment by

17

comprehensive study or a review

18

panel."

19

20

This guidance reflects the fact that an

21

Environmental Assessment is intended to make

22

reasonable predictions about what is likely to

23

occur in the future and not what is speculative.

24

It does not and cannot be expected to predict all

25

effects with certainty or finality. This was

1 confirmed by the Federal Court of Appeal in **Alberta**
2 **Wilderness Association v. Express Pipelines** when it
3 held that, and I quote (as read):
4

5 "No information about the
6 probable future effects of a
7 project can ever be complete or
8 exclude all possible future
9 outcomes."
10

11 Uncertainty is managed through monitoring to
12 verify predictions and implementing adaptive
13 management if the actual effects are different from
14 what was predicted. The Federal Government
15 witnesses agreed with this approach.

16 The Shell witnesses responded to Mr. Cooke's
17 questions by explaining that uncertainty is
18 something that is inherent in any development and
19 companies like Shell evaluate those uncertainties
20 and the risks associated with those uncertainties
21 as part of every decision they make.

22 Shell's history in the Oil Sands Region, as
23 well as the extensive work that has gone into the
24 EIA for this Project, provide a high degree of
25 certainty that these types of risks can be managed

1 proactively. The oil sands industry has shown that
2 when new challenges present themselves, whether
3 they be through new regulatory requirements or new
4 information from environmental effects monitoring,
5 the industry will collaboratively work together to
6 address this new issue and will modify their
7 operations as necessary. This strong track record
8 demonstrates that Shell will be able to adaptively
9 manage any outcome from the variety of
10 uncertainties that has been identified.

11 In short, Shell has managed uncertainty for
12 the Project through using conservative assumptions
13 and models in the Environmental Assessment,
14 validating those models, and in some cases
15 verifying those models based on actual monitoring
16 results, by developing comprehensive follow-up and
17 monitoring plans, committing to adaptive management
18 if monitoring shows different results from what the
19 EIA predicted, and participating in
20 multi-stakeholder industry groups such as CEMA and
21 COSEA to study and address these issues and
22 proactively work to resolve them.

23 Let me now turn to government recommendations
24 before I wind up the environmental section. This
25 is the final issue I'd like to address in this

1 area.

2 Mr. Chairman, several of the recommendations
3 from the Federal Government are not required for
4 the purposes of this process since most have been
5 addressed already on the record or are more
6 appropriately the subject matter of regional
7 multi-stakeholder initiatives such as the FiSH
8 Committee.

9 The purposes of a Fisheries and Oceans
10 Canada, Environment Canada, Natural Resources
11 Canada, and Transport Canada's participation in
12 this process is to provide advice to the Panel
13 pursuant to Section 20 of the CEAA. The advice is
14 to assist the Panel in determining whether there
15 are any likely significant adverse environmental
16 effects.

17 Shell provided its response to each Federal
18 Government recommendation in its Reply Submission
19 dated October 15th. And I would urge the Panel to
20 have a look at that submission carefully to
21 determine whether a proposed recommendation is
22 necessary to mitigate the environmental effects of
23 this Project.

24 And in conducting that review, Panel, let me
25 give you a simple test to evaluate the

1 recommendations that have been put forward. I
2 think you should ask yourself this first question:
3 "Is the recommendation required to ensure that the
4 Project is not likely to cause a significant
5 adverse environmental effect?" That's the question
6 you should ask yourself.

7 This assessment should consider the
8 assessment on the record. For many
9 recommendations, federal regulators have not
10 provided evidence to suggest they are required, or
11 have provided any nexus between the risk of a
12 significant effect and the recommendation itself.
13 They also have provided no evidence which would
14 contradict Shell's conclusions.

15 If the recommendation is not required to
16 ensure that the Project is not likely to cause a
17 significant adverse effect, it should not be
18 included in the Panel's report unless it is
19 directed to government or regulators to plan for
20 and manage regional issues.

21 And the second test you can apply in respect
22 of monitoring recommendations, you should ask
23 yourself this question: "Is the level of
24 uncertainty such that there is a risk of a
25 significant adverse environmental effect?" And if

1 the answer to that question is "yes," then the
2 monitoring to verify the prediction and adaptively
3 manage the issue is required, and the
4 recommendation should be required.

5 Finally, it is important to recognize that
6 Alberta already regulates many of these issues
7 through legislation and Shell's environmental **EPEA**
8 approval. And they do it very well. This Panel
9 can and should rely on Alberta's ability and
10 constitutional right under the law to regulate
11 these matters.

12 With that context, let me discuss just a
13 couple of the specific recommendations that were
14 made by the Federal Government.

15 First, many of the DFO's recommendations were
16 discussed with Mr. Makowecki during the hearing and
17 he agreed that several of the DFO recommendations
18 can be achieved through Shell's participation in
19 regional multi-stakeholder initiatives such as the
20 FiSH Committee.

21 Specifically with respect to DFO
22 recommendation two, which recommends that Shell's
23 No Net Loss Plan include a minimum compensation
24 ratio of 2:1, Mr. Makowecki agreed that DFO will
25 work with Shell on its No Net Loss Plan and will

1 consider a variety of factors in determining the
2 appropriate compensation ratio, and that DFO's
3 recommendation can be amended to require Shell to
4 aim for a 2:1 compensation ratio as opposed to
5 requiring a minimum 2:1 compensation ratio.

6 With respect to Environment Canada's
7 recommendations, Shell responded to each of these
8 recommendations in its October 15 Reply Submission,
9 and I won't repeat them here. I would, however,
10 like to discuss three of the recommendations
11 specifically.

12 Recommendation 1D was for Shell to identify
13 and implement measures that avoid the affects of
14 drawdown of the lenticular patterned fen and yellow
15 rail habitat during Project construction and
16 operations. Shell provided information in response
17 to IRs that outlined potential mitigation measures
18 to reduce drawdown of the lenticular fen, including
19 establishing a mine setback or constructing an
20 engineered mitigation such as a barrier and pumping
21 system.

22 However, these mitigations are very expensive
23 and Shell concluded that they were not required to
24 avoid significant adverse environmental effects.

25 Environment Canada conceded that their

1 recommendation was provided based solely on
2 environmental concerns and did not consider other
3 factors such as cost or resource sterilization.

4 In these circumstances, Panel, the balance of
5 the evidence is that this recommendation is not
6 necessary to avoid significant adverse effects and
7 monitoring will show whether additional mitigation
8 may be required in the future.

9 Second, I already addressed Environment
10 Canada's Recommendation 1E in the context of
11 conservation allowances and why Shell's position is
12 that conservation allowances are not required or
13 appropriate in these circumstances.

14 Environment Canada was clear during the
15 hearing that Recommendation 1E was simply intended
16 to suggest that conservation allowances be
17 considered as one of a variety of tools in the
18 mitigation toolbox.

19 Again, Mr. Chairman, conservation allowances
20 are not needed here, particularly given Alberta's
21 land use planning efforts under LARP.

22 Finally, Environment Canada's Recommendation
23 number 8C contemplates public disclosure of
24 Emergency Response Plans. Emergency Response Plans
25 are sensitive documents, Mr. Chairman, and Shell

1 cannot publicly disclose these plans. But Shell
2 will of course continue to work with the Board to
3 ensure that the Emergency Response Plans for the
4 Project are developed in accordance with the
5 Board's requirements.

6 Let me now turn to the next primary or main
7 issue, which is Aboriginal consultation. One of
8 the primary elements of Shell's sustainable
9 development policy is its ongoing substantive
10 involvement with its stakeholders and neighbours
11 that allows Shell to identify issues and address
12 them in a meaningful way. Put simply, Shell's
13 public consultation program ensures that its
14 Aboriginal neighbours have input into its
15 decisions.

16 Mr. Chairman, I think the results of Shell
17 applying these principles to its daily operations
18 speak for itself. The Fort McKay First Nation,
19 Fort McKay Métis Local 63, Mikisew Cree First
20 Nation, and Chipewyan Prairie Dene First Nation,
21 all had concerns about the Project. Shell worked
22 hard to resolve those concerns, and, through a
23 collaborative and consultative process was able to
24 address those concerns.

25 Others have continuing concerns and Shell

1 respects those concerns, but parties can and do
2 disagree about issues. It is then up to the Panel
3 to assess what the actual effects of the Project
4 are.

5 Before I get into the details of Shell's
6 consultation record for this Project, I think it's
7 helpful to briefly outline the legal framework
8 around Aboriginal consultation and what is
9 required.

10 Section 35 of the **Constitution Act** provides
11 that the existing Aboriginal and Treaty Rights of
12 the Aboriginal peoples of Canada are hereby
13 recognized and affirmed. Aboriginal Rights are
14 elements of a practice, custom, or a tradition
15 integral to the distinctive culture of the
16 Aboriginal group claiming the right. Treaty
17 Rights, by contrast, are those rights granted
18 through a Treaty between an Aboriginal group and
19 the Crown. For example, Treaty 8 granted the
20 signatories to the Treaty the right to hunt and
21 trap on unoccupied Crown land within the geographic
22 boundaries of the Treaty, subject to the Crown's
23 right to take up those lands.

24 It is important to recognize that Aboriginal
25 and Treaty Rights are held by a collective, they

1 are a right of the people in common and not
2 individual rights.

3 Aboriginal Rights and Treaty Rights are not
4 absolute and may be infringed if justified. Thus,
5 where an Aboriginal community can establish that it
6 has or is likely to have Aboriginal or Treaty
7 Rights in an area affected by a particular project,
8 the Crown will be required to demonstrate that any
9 infringement resulting from a project is justified.
10 The infringement of Aboriginal interests from an
11 activity does not arise from the project itself,
12 but, rather, from the government's approval of the
13 project pursuant to legislation and regulation.
14 And one of the factors in determining whether the
15 infringement is justified is whether the Aboriginal
16 group has been adequately consulted about potential
17 impacts of the project which is the subject of
18 government action.

19 The Supreme Court of Canada in **Haida**
20 established the basic principle for Aboriginal
21 consultation in Canada, namely, that the honour of
22 the Crown demands that government consult and
23 possibly accommodate the interests of Aboriginal
24 people when government conduct may infringe on
25 their Section 35 rights.

1 Similarly, in *Mikisew Cree v. Canada*, the
2 Supreme Court of Canada held that the process by
3 which lands taken up by the Crown under Treaty 8 is
4 dictated by the duty of the Crown to act honourably
5 and that includes the duty to consult. And I give
6 this by way of background to help us understand the
7 fulsomeness of consultation in this Project.

8 Aboriginal Rights fall along a spectrum with
9 respect to their degree of connection to the land.
10 At one end of the spectrum are practices, customs
11 and traditions that are integral to the distinctive
12 Aboriginal culture and the group claiming the
13 right, such as religious ceremonies, language and
14 dialect, site-specific rights that are dependent on
15 the use of the land, such as harvesting, fishing
16 and trapping are somewhere in the middle of that
17 spectrum, and Aboriginal title being an
18 indefeasible-like interest in land is at the other
19 end of the spectrum.

20 The scope of the Crown's consultation
21 obligation is proportionate to the strength of the
22 asserted right or title and the seriousness of the
23 impact on the proposed decision on the exercise of
24 traditional rights.

25 On the deeper end of the spectrum, the

1 Supreme Court of Canada has held that meaningful
2 consultation requires that the Crown provide those
3 claiming the Aboriginal or Treaty Right an
4 opportunity to make submissions, permit those
5 claiming a right to formally participate in the
6 decision-making process, and provide written
7 reasons to show that Aboriginal concerns were
8 considered and to reveal the impact they had on the
9 decision.

10 Even when the duty to consult falls on the
11 deeper end of the spectrum, the Supreme Court in
12 ***Taku River*** held that the regulatory process can be
13 used to satisfy the duty to consult. Similarly, in
14 ***Broken Head Ojibway Nation v. Canada***, the Federal
15 Court confirmed that when determining whether and
16 to the extent the Crown has a duty to consult with
17 Aboriginal peoples about projects or transactions
18 that may affect their interests, the Crown may
19 fairly consider the opportunities for Aboriginal
20 consultation that are available within the existing
21 processes for regulatory or environmental review.

22 This is not a delegation of the Crown's duty
23 to consult, but only one means by which the Crown
24 may be satisfied that Aboriginal concerns had been
25 heard and, where appropriate, accommodated.

1 The duty to consult, therefore, boils down to
2 sharing information with potentially affected
3 Aboriginal groups, providing opportunities for
4 those groups to review the information and provide
5 input to the decision maker, and for the decision
6 maker to consider Aboriginal concerns in making
7 their decisions.

8 The courts have been clear that the duty to
9 consult does not require a project proponent to
10 offer any particular form of accommodation to
11 Aboriginal groups, nor does it provide any
12 Aboriginal group with an effective veto over a
13 proposed project.

14 Rather, courts have held that the Crown's
15 fiduciary duty to Aboriginal groups must be
16 balanced against its responsibilities towards all
17 Canadians and that the decision maker should
18 balance societal and Aboriginal interests in making
19 decisions that may affect Aboriginal claims.

20 The hearing for this Project is part of the
21 consultation process. The hearing provided
22 opportunities for Aboriginal groups to submit
23 information on the nature and scope of their
24 Aboriginal or Treaty Rights in the Project area, as
25 well as the potential adverse effects on those

1 rights and Shell's plans to mitigate any such
2 effects.

3 Under its Terms of Reference, the Panel is
4 required to consider this information in
5 determining whether the Project is likely to result
6 in significant adverse environmental effects.

7 The Panel is also required to reference this
8 information in its report.

9 Turning to Shell's consultation for this
10 Project, Mr. Chairman, Shell's public consultation
11 process involved gathering input from communities,
12 individuals and groups, to identify and understand
13 issues and concerns, determining what can be done
14 to address their concerns and implementing
15 agreed-upon actions.

16 Shell has placed extensive Consultation Logs
17 on the record for all Aboriginal groups that
18 expressed an interest in the Project, and has made
19 significant efforts to provide those communities
20 with opportunities to participate in the planning
21 of the Project.

22 Shell has been consulting with Aboriginal
23 communities in the Project area for more than 15
24 years. For this Project, Shell developed a
25 Consultation Plan which was approved by Alberta

1 Environment in 2007. This plan was subsequently
2 updated in 2010. Shell consulted in accordance
3 with this Consultation Plan. It consulted with
4 each interested community to determine how that
5 community wished to be consulted and how they
6 wished to contribute to the Project. Shell
7 provided regular updates about the Project and
8 provided opportunities for potentially affected
9 groups to provide input and express any concerns
10 they might have.

11 Communities were also given opportunities to
12 conduct Traditional Land Use Studies. In addition,
13 Shell included Aboriginal representatives from
14 participating communities in the carrying out of
15 vegetation and wetlands, wildlife, fish and fish
16 habitat, and archaeological biophysical studies all
17 in support of the EIA.

18 Notwithstanding Shell's generally strong and
19 positive relationship with Aboriginal communities
20 in the Project area, evidenced by the support of
21 the communities in closest proximity to the
22 Project, several of the identified Aboriginal
23 communities have expressed concern about the
24 Project. Shell has documented all of the
25 engagements that have taken place with each of

1 these communities and has summarized the issues,
2 the issues discussed, and the outcomes of those
3 engagements.

4 Not all of the concerns that were raised by
5 Aboriginal communities related to project-specific
6 issues. Many of them dealt with cumulative effects
7 of regional development that were unrelated to this
8 Project. Or they related to capacity building for
9 the community that would allow the community to
10 participate more fully in future developments that
11 again were unrelated to this Project.

12 For the concerns that relate to this Project,
13 Shell has responded to those concerns and proposed
14 Project-specific mitigation measures.

15 For the broader issues that were raised that
16 extend beyond the scope of this Project, Shell has
17 committed to working with governments and other
18 stakeholders to address those concerns.

19 Shell does not believe this proceeding is the
20 forum to address those concerns that extend beyond
21 the scope of the Project.

22 Let me now turn to Shell's record of
23 consultation with Aboriginal groups that were most
24 active in this proceeding.

25 First, with respect to ACFN, Shell has been

1 consulting with ACFN since the mid-1990s. Shell
2 had a number of agreements with ACFN for both the
3 Muskeg River Mine and Jackpine Mine Phase I
4 projects that seek to mitigate the effects of those
5 projects on the community. On its existing oil
6 sands project, ACFN businesses have received more
7 than \$200 million in business from Shell. Shell
8 has also invested millions of dollars on cultural
9 and community initiatives in Fort Chipewyan.

10 ACFN has suggested that consultation must be
11 meaningful. Shell agrees with that. But if
12 Shell's consultation with ACFN on this Project has
13 not been meaningful, I'm not sure what would be.
14 Shell has been consulting with ACFN on this
15 specific Project since 2006. The parties entered
16 into a Protocol Agreement in September of 2008 that
17 confirmed the process and core principles of
18 consultation for the Project. Consultation with
19 ACFN has included meetings with the Chief and
20 Council, meetings with Elders, meetings with the
21 ACFN Industrial Relations Committee, and
22 consultants, and Open Houses in the community of
23 Fort Chipewyan. Shell funded an ACFN Traditional
24 Land Use Study for the Project in 2008. In 2009,
25 Shell funded ACFN's Technical Review of the Project

1 Application which resulted in ACFN providing more
2 than 300 technical questions to Shell, each of
3 which Shell responded to. Shell also funded an
4 updated Traditional Land Use Study for the Project
5 in 2011 and again in 2012, and ACFN's reviews of
6 Shell's Draft No Net Loss Plan, Shell's Muskeg
7 River Diversion Alternative, and Shell's
8 Socio-Economic Impact Assessment.

9 Shell explained during the hearing that ACFN
10 input was incorporated into the Project in a
11 variety of ways, including the Muskeg River
12 Diversion Alternative, Shell's Reclamation Plans,
13 the No Net Loss Plan for the Project, monitoring
14 programs, and employment and contracting
15 opportunities.

16 Shell has summarized its engagement with ACFN
17 in the Consultation Logs for the Project, but has
18 also detailed ACFN's substantive concerns and
19 provided responses to those concerns.

20 Shell also provided opportunities to ACFN and
21 other groups to review the Consultation Logs and
22 provide input, which was also recorded.

23 Finally, since ACFN has entered into
24 mitigation agreements with project proponents for
25 past oil sands mines in the area, including the

1 Muskeg River Mine Expansion and Jackpine Mine
2 Phase I, Shell attempted to negotiate a mitigation
3 agreement with ACFN for this Project. However,
4 ACFN requested a precondition to these negotiations
5 that was considered unacceptable by Shell, hence no
6 agreement could be reached by the parties. Parties
7 can and do disagree.

8 Throughout this process, including during the
9 hearing itself, ACFN has provided its perspective
10 and concerns to Shell and to the Crown. In the
11 Notice of Question of Constitutional Law hearings,
12 ACFN's counsel submitted as follows, and I quote
13 (as read):

14
15 "The Athabasca Chipewyan
16 First Nation has been providing
17 comments and information, the basis
18 of its rights, to Canada and
19 Alberta for four years. They've
20 been telling the Crown what they
21 say the impact this Project will
22 have on their rights has been, so
23 this should not be the first time
24 the Crown considers what the impact
25 of the Project will be. The Crown

1 has had a lot of information about
2 that."

3
4 Simply put, Mr. Chairman, ACFN has provided
5 thousands of pages of submissions in this
6 proceeding and has participated throughout the
7 regulatory review process, including commenting on
8 the Panel's Terms of Reference, the Joint Panel
9 Agreement, and the CEAA's agency Draft Consultation
10 Plan. Shell has attempted to work with ACFN to
11 resolve their outstanding concerns, but let me be
12 clear, this is not a dispute about consultation,
13 this is a dispute about EIA methodology and ACFN
14 simply not agreeing with the conclusions in Shell's
15 assessment.

16 In ***Taku River***, the Supreme Court of Canada
17 stated that, and I quote (as read):

18
19 "Where consultation is
20 meaningful, there is no ultimate
21 duty to reach agreement. Rather,
22 accommodation requires that
23 Aboriginal concerns be balanced
24 reasonably with the potential
25 impact of the particular decision

1 on those concerns and with
2 competing societal concerns."

3
4 Therefore, failure to agree with ACFN does
5 not mean that consultation has been in any way
6 inadequate. On the contrary. I encourage the
7 Panel to review Shell's consultation records with
8 ACFN closely to see exactly how much time and
9 effort has been invested in Shell's engagement with
10 ACFN on this Project. Then it can move on to
11 consider what the actual impacts of the Project are
12 and balance those potential impacts with the
13 potential benefits of the Project.

14 Let me turn now to Fort McMurray First Nation
15 468. Fort McMurray 468 has also been engaged from
16 a very early stage in this Project. Shell funded a
17 Traditional Land Use Study in 2006 which
18 demonstrated that the Project area is located at
19 the very northern fringe of their traditional
20 territory and that the vast majority of TLU sites
21 are much further to the south. This was again
22 reflected in the maps that Fort McMurray 468
23 provided to Shell in December of 2011.

24 As Ms. Jefferson explained during the
25 hearing, Shell has repeatedly invited Fort McMurray

1 468 to provide additional traditional land use
2 information to demonstrate potential impacts of the
3 Project, but based on the information that has been
4 received to date, there is no potential for the
5 Project to significantly impact the TLU of that
6 community. Therefore, Ms. Jefferson explained that
7 Shell was not willing to fund additional
8 Traditional Land Use Studies for Fort McMurray 468.

9 Panel, the Energy and Resources Conservation
10 Board in the original Muskeg River Mine approval
11 held that information specific to each Aboriginal
12 community is not required. In this case, Shell
13 relied on the TLU information from other Aboriginal
14 groups in the area that have far more likelihood of
15 being affected by this Project as to the use of the
16 area for the exercise of Treaty 8 Rights which were
17 common rights to all signatories to the Treaty.

18 In addition, it is also important to note
19 that Fort McMurray 468 has not had its evidence
20 adopted in this proceeding, and has not provided
21 Shell and other parties with the ability to
22 question them or cross-examine their evidence. As
23 a result, Mr. Chairman, I suggest that Fort
24 McMurray 468 has been adequately consulted on this
25 Project and the exercise of its rights will not be

1 significantly impaired by this approval.

2 Next, the Métis Nation of Alberta has
3 participated in this proceeding both on its own
4 behalf and on behalf of several Métis Locals and
5 Métis individuals.

6 In a January 25, 2012 meeting with MNA Region
7 1, Shell was advised that Region 1 was pursuing a
8 new mandate to give greater representation to Métis
9 Locals in regulatory matters and that it would be
10 intervening in Shell's Project in part to pursue
11 greater recognition from the Crown for a Métis
12 Consultation Policy. However, it remains unclear
13 whether Métis Locals in the region intend to be
14 represented by the MNA Region 1 for the purposes of
15 consultation. The MNA Region 1 claims that it
16 represents all Métis in the region, but it does not
17 represent Métis Local 63 in this hearing, despite
18 the fact that Local 63 is the closest Métis Local
19 to the Project.

20 As late as July of this year, Métis Local
21 125's position to Shell was that the MNA did not
22 represent them in consultation and Shell should
23 consult directly with Métis Local 125.

24 In addition, the Locals and the MNA both
25 claim to be Métis rights-bearing communities. The

1 Supreme Court of Canada in *R. v. Powley* held that
2 in order to demonstrate Métis rights, the claimants
3 must belong to an identifiable Métis community with
4 a sufficient degree of continuity and stability to
5 support a site-specific Aboriginal Right.

6 Courts have subsequently determined that to
7 meet the test under *Powley*, claimants must produce
8 significant evidence addressing each of these
9 factors.

10 Mr. Chairman, it is not clear to Shell who of
11 the Métis Locals, the MNA, and the MNA Region 1,
12 constitutes an identifiable Métis community for the
13 purposes of the *Powley* test. This is all very
14 foggy, in the words of Mr. Cooke, and it seems
15 appropriate that in the absence of a Métis
16 Consultation Policy, Shell focused its consultation
17 on the Métis Locals which represent the Métis
18 individuals that actually have the potential to be
19 impacted by the Project. Shell proceeded on the
20 assumption that the Métis had the rights they
21 asserted.

22 Shell's evidence is that it has consulted
23 with all potentially affected Métis communities and
24 the MNA Region 1 and has done so since 2007.

25 MR. PERKINS: Mr. Chairman, apparently, I

1 don't know about others in the room that may have
2 LiveNote, apparently there's a problem with it on
3 the staff side, but there's no problem in terms of
4 capturing what's being said in argument, so there's
5 not a transcribing problem, I should say, there's
6 just a LiveNote problem, so maybe the best thing to
7 do would be to continue and we could try to deal
8 with it at the lunch break.

9 THE CHAIRMAN: Yes, let's continue to your
10 next break, sir.

11 MR. DENSTEDT: Shell provided Project
12 information, including the EIA, Project Updates,
13 and Responses to Supplementary Information
14 Requests, to the MNA, MNA Region 1, Fort McKay
15 Metis Local 63, Fort Chipewyan Métis Local 125,
16 Conklin Métis Local 193, Chard Métis Local 214,
17 Willow Lake Métis Local 780, Fort McMurray Métis
18 Local 1935, and Fort McMurray Métis Nation Local
19 2020.

20 Through preliminary consultation and concerns
21 raised, Shell was able to determine that Fort McKay
22 Local 63, Fort Chipewyan Local 125, and Fort
23 McMurray Local 1935, were the only Locals Métis
24 members whose Aboriginal Rights might be impacted
25 by the Project.

1 The first of these Locals, Fort McKay Métis
2 Local 63, has been represented by the Fort McKay
3 First Nation through its consultation office and
4 has been included in the traditional knowledge and
5 traditional land use initiatives completed by the
6 First Nation.

7 Métis Local 63 has removed its Statement of
8 Concern along with the Fort McKay First Nation and
9 it is no longer objecting to the Project.

10 For the other two Locals, Shell provided
11 numerous opportunities for these Locals to
12 understand the potential adverse impacts of the
13 Project and to discuss their concerns so that they
14 could be addressed by Shell. Shell held dozens of
15 meetings with Métis Locals 125 and 1935 in which
16 Shell discussed the Project, provided updates on
17 the Project, and specifically to discuss Shell's
18 Draft No Net Loss Plan for the Project.

19 Shell has Good Neighbour Agreements with both
20 of these Locals and has been cooperatively working
21 with both those Locals through annual work plans.

22 Shell has provided funding to both Locals to
23 collect traditional land use, including *The Mark of*
24 *the Métis* study that MNA Region 1 filed during the
25 hearing.

1 Shell has responded to each of the concerns
2 that the Métis Locals have raised and those
3 responses are on the record.

4 The relationship between Shell and these
5 Métis Locals has been and continues to be in
6 Shell's view, and in the words of the president of
7 Local 125, "very good."

8 Shell was only recently made aware that
9 Locals 125 and 1935 might have outstanding concerns
10 in respect of the Project.

11 MNA Region 1's historian, Mr. Fortna,
12 repeatedly expressed concerns during his testimony
13 that consultation between Shell and the Métis was
14 not meaningful because capacity funding was not
15 provided to the MNA or Métis Locals to allow them
16 to meaningfully engage in the Project. This
17 testimony is incorrect, Mr. Chairman. Since 2007,
18 Shell has provided for or committed to more than
19 \$700,000 to Locals 125 and 1935 based on the needs
20 identified by those communities.

21 In addition, the MNA Region 1 received in
22 excess of \$80,000 in funding from the CEAA agency
23 to assist the MNA Region 1 in its participation in
24 a review of this Project and the Pierre River Mine
25 project. Presumably this funding should have at

1 least been sufficient for the MNA Region 1 to
2 conduct a review of the Project Application.

3 The MNA Region 1 submission on October 1st
4 contained assumptions about water quantity, water
5 quality, and effects on McClelland Lake, which are
6 unsupported by any evidence and inconsistent with
7 the conclusions in Shell's EIA. Mr. Fortna
8 conceded that these assertions were made without
9 considering any of Shell's evidence and were based
10 solely on the perception of community members.

11 In addition, in response to MNA Region 1's
12 questions during the hearing about capacity funding
13 to review Shell's No Net Loss Plan for the Project,
14 the CEAA agency specifically invited the Métis
15 Locals to apply to that agency for additional
16 technical funding to review the No Net Loss Plan
17 for the Project in February of 2011.

18 Finally, John Malcolm has sought to represent
19 the Non-Status Fort McMurray Band, the Non-Status
20 Fort McKay Band, the Clearwater River Paul Cree
21 Band No.175, and the Wood Buffalo Elders Society.
22 These groups were not allowed to file evidence in
23 the proceeding as their submissions were filed
24 after the submission deadline, but they provided
25 oral evidence at the hearing.

1 Despite the fact that these groups have been
2 determined by the agency and the Government of
3 Alberta not to have Aboriginal Rights for which the
4 duty to consult is owed, Shell consulted with these
5 communities and provided funding for an April 2008
6 study which included traditional land use
7 information from members of the Wood Buffalo Elders
8 Society for use in Shell's current oil sands
9 applications.

10 In summary, Mr. Chairman and Panel Members,
11 the evidence shows that Shell's engagement with all
12 Aboriginal communities with the potential to be
13 affected by this Project has been exemplary. Shell
14 has made reasonable and appropriate efforts to
15 engage with each of these Aboriginal communities
16 and has incorporated their input into Project
17 planning.

18 And that's a logical place for me to stop,
19 Mr. Chairman.

20 THE CHAIRMAN: Very good, sir. We'll resume
21 at 1:00 p.m.

22 I misunderstood. Did you want a short break
23 now or lunch?

24 MR. DENSTEDT: It would be useful for us to
25 have a short break now and then my friends could

1 have the entirety of my argument before lunch.

2 THE CHAIRMAN: Ten minutes.

3

4

(Brief Break)

5

6 THE CHAIRMAN: We should take your places,
7 please.

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

9 That brings me to the issue of impacts on
10 traditional land and resource use, which was one of
11 the main issues we heard during the hearing.

12 The Registry contains numerous extensive
13 assessments of TLU in this region, including
14 assessments conducted by Shell and its consultants
15 as well as by many of the Aboriginal groups and
16 their consultants. ACFN alone has filed several
17 TLU studies specifically for this Project that were
18 conducted by its consultants Fire Light and MSCS.

19 Shell's assessment of potential effects of
20 the Project on TLU relied on these studies, as well
21 as on studies from other Aboriginal groups in the
22 Project area such as the Fort McKay First Nation,
23 and Métis Local 63, and the Mikisew Cree First
24 Nation. Shell also relied on many other TLU
25 studies from past projects in the area, including

1 the Muskeg River Mine and the Jackpine Mine
2 Phase I.

3 Shell conducted a traditional land use
4 assessment and a traditional land use Environmental
5 Setting Report for the Project in support of its
6 2007 EIA. Focusing specifically on ACFN, TLU
7 information was provided by ACFN in 2008 and later
8 updated in 2011 based on an agreed-upon workplan
9 with Shell. Shell filed ACFN's Integrated
10 Traditional Land Use Study for the Project in
11 April of 2011. After receiving ACFN's updated
12 information, Shell provided a draft TLU assessment
13 to ACFN for their review. ACFN provided comments
14 on that draft and Shell responded to ACFN's
15 comments in writing and in a meeting in June of
16 2011.

17 In November of 2011, Shell filed its Updated
18 TLU Assessment together with a copy of ACFN's
19 concerns regarding the assessment. Shell's
20 assessment concluded that the updated traditional
21 land use information provided by ACFN and other
22 groups was consistent with the information that
23 informed the EIA and therefore the conclusions in
24 the EIA remain unchanged.

25 Shell also funded additional revisions to

1 ACFN's Integrated TLU Study which was submitted as
2 part of ACFN's evidence on October 1, 2012. Again,
3 the ACFN TLU information that was filed in 2012 was
4 reviewed by Shell and was found to be consistent
5 with the conclusions in Shell's EIA.

6 Shell also consulted with Métis Locals, as I
7 discussed earlier, to provide opportunities for
8 them to provide input into the Project including
9 providing information about Métis land and resource
10 use.

11 Shell provided funding to Métis Local 125 in
12 2009 for a Traditional Land Use Study that has not
13 yet been completed.

14 Also in 2009, Shell provided funding to Métis
15 Local 1935 in accordance with their wishes and
16 direction for support of the *Mark of the Métis*
17 study, the video portion of that study which was
18 completed and considered in Shell's Assessment of
19 Project Affects on Traditional Land Use.

20 Métis Local 63 was included in the extensive
21 Traditional Land use work that was done with the
22 Fort McKay First Nation and that was also included
23 in the Assessment, including the Fort McKay
24 Community-Specific Assessment that considered the
25 effects of the Project specifically on those

1 groups.

2 As a result, Shell has a thorough
3 understanding of Aboriginal traditional land and
4 resource use in the Project area and the broader
5 region. Shell examined the evidence provided by
6 those groups regarding the areas in which they
7 exercised Aboriginal Rights including hunting,
8 fishing, trapping, and other activities, and
9 determined how the Project would impact those
10 areas.

11 This assessment considered how the Project
12 would affect the availability of resources that are
13 harvested by Aboriginal groups for their continued
14 use, as well as how the Project would affect access
15 to those resources.

16 The EIA concluded that during construction
17 and operation, the Project will result in a direct
18 loss of land for hunting, trapping, and plant
19 harvesting, for traditional land users,
20 particularly the six registered fur management
21 holders and their families.

22 Given that information collected on
23 traditional use indicated almost no subsistence
24 fishing within the Project footprint, the EIA
25 concluded that the Project would not have a direct

1 effect on traditional fishing within the LSA.

2 This conclusion was supported by Marvin
3 L'Hommecourt's testimony where he said that nobody
4 really uses the portion of the Muskeg River that
5 crosses the Project.

6 Overall, the EIA determined that the Project
7 will not prevent traditional land users from
8 accessing any areas in the region except within the
9 Project development area itself prior to site
10 reclamation. Combining the assessment of Project
11 effects on access with the assessed effects on
12 terrestrial and fish resources, the EIA determined
13 that the Project is not likely to have a
14 significant effect on traditional hunting and
15 trapping, traditional plant harvesting or
16 traditional fishing within the region.

17 Within the broader region, the EIA concluded
18 that the Project would result in a negligible to
19 low environmental consequence on the availability
20 of traditional resources in the RSA. For example,
21 project-related disturbance will affect less than
22 1.0 percent of the area of ACFN's traditional
23 territory. On a cumulative basis, roughly
24 11 percent of the ACFN's traditional territory was
25 considered disturbed at Base Case, and the Planned

1 Development Case will increase that number to
2 13 percent.

3 Changes in access resulting from Project
4 activities will have negligible environmental
5 consequences at the LSA and the RSA levels.

6 Shell has also committed to the following
7 initiatives to minimize the Project's impact on
8 traditional land and resource use. These are as
9 follows:

10 Undertaking progressive reclamation wherever
11 practical;

12 Facilitating access across the Project area
13 by trappers to their traplines;

14 Providing compensation to trappers directly
15 affected by the Project as per industry standards
16 and past precedent;

17 Negotiating mitigation agreements with
18 willing First Nations whose traditional land uses
19 are directly impacted by the Project, which in this
20 case currently include Fort McKay First Nation,
21 Métis Local 63, and Mikisew Cree First Nation;

22 Actively participating in regional
23 multi-stakeholder planning and research initiatives
24 to address the long-term sustainability of
25 effective traditional land use, including the

1 Reclamation Working Group, and the Sustainable
2 Ecosystems Working Group;

3 Continuing to consult with all potential
4 affected Aboriginal groups, including Fort McKay,
5 Mikisew Cree, ACFN, and the Métis Locals;

6 And implementing the mitigations outlined
7 throughout the EIA, as amended, to minimize effects
8 of the Project on the resources that are relied on
9 for traditional uses and activities.

10 Shell is also committed to providing a system
11 for cultural diversity awareness training for their
12 employees and contractors regarding respect for
13 traditional resource users, traplines, cabins,
14 trails and equipment.

15 Mr. Chairman, through different initiatives,
16 Shell has shown a commitment to working with
17 Aboriginal groups to ensure that they can continue
18 to use the land and resources in a traditional way.
19 Shell has been successful in addressing the
20 concerns of the Chipewyan Prairie Dene First
21 Nation, and in reaching agreements with Fort McKay,
22 Fort McKay Métis Local 63, and MCFN to address
23 their concerns and has entered into similar
24 arrangements in the past with ACFN for the Jackpine
25 Mine Phase I. Shell has implemented initiatives to

1 minimize any Project-related impacts on traditional
2 land and resource use, and these have proven
3 effective as there will be negligible effects on
4 the availability of traditional resources at the
5 RSA level and changes in access to the LSA and RSA
6 levels. As a result, the Project is not likely to
7 have any significant impact on the users of those
8 resources.

9 So ACFN's traditional land use expert,
10 Dr. Candler, submitted several reports that purport
11 to assess the impacts of the Project on ACFN
12 traditional land and resource use, but
13 Dr. Candler's approach is inconsistent with CEAA
14 agency guidance as well as the nature of Aboriginal
15 Rights.

16 Dr. Candler assessed impacts on ACFN TLU on
17 the basis of strong concerns for the most sensitive
18 individuals impacted by the Project. Dr. Candler
19 was explicit that his assessment was not an
20 assessment of impacts on the entire community.

21 His assessment was that, if an individual
22 ACFN member experienced significant effects, that
23 would be a significant effect on the ACFN
24 community, based on his methodology.

25 This is inconsistent with standard

1 environmental assessment practice that considers
2 significance from the broader community level, not
3 the individual. It is also inconsistent with what
4 was arguably the most extensive Joint Review Panel
5 of potential impacts on traditional uses ever
6 conducted in the country's history. In the Final
7 Report for the Joint Review Panel for the Mackenzie
8 Gas Project, that panel stated as follows, and I
9 quote (as read):

10
11 "There may well be impacts on
12 regions or communities that would
13 be significant to those regions or
14 communities but which the Panel in
15 its collective judgment has
16 concluded are not significant in
17 the context of its overall mandate.
18 There may well be impacts on
19 individuals that from an individual
20 perspective would be significant,
21 but which, again, the Panel might
22 conclude would not be significant
23 in the broader context."

24
25 The idea that there are degrees of importance

1 which must be considered when determining
2 significance under the CEAA has also been
3 acknowledged by the Canadian courts. In **Alberta**
4 **Wilderness Association v. Express Pipelines**, the
5 Court of Appeal stated as follows, and I quote:

6
7 "The principal criteria set
8 out by the CEAA is the significance
9 of the environmental effects of the
10 project. That is not a fixed or
11 wholly objective standard and
12 contains a large measure of opinion
13 and judgment. Reasonable people
14 can and do disagree about the
15 adequacy and completeness of
16 evidence which forecasts future
17 results and about the significance
18 of such results without thereby
19 raising questions of law."

20
21 Therefore, in considering whether adverse
22 effects caused by the Project are likely to be
23 significant, the Panel must ask itself whether any
24 likely adverse environmental effects are
25 significant in relation to the size and the scope

1 of the environment in which the Project will be
2 carried out and in the broader context of the
3 long-term benefits of the Project.

4 In addition, as I discussed earlier,
5 Aboriginal and Treaty Rights are collective rights,
6 not individual rights. Therefore, assessing
7 impacts on a community's Aboriginal Rights on the
8 basis of certain individuals does not reflect the
9 legal nature of the rights potentially being
10 affected. This is particularly true given that
11 Dr. Candler's assessment relies primarily on a
12 single trapline. And as Ms. Somers correctly noted
13 in her testimony, commercial trapping rights are
14 much different than Treaty Rights.

15 The trapline relied on by Dr. Candler is also
16 included in Fort McKay's traditional land use work,
17 which suggests that traditional use by the most
18 proximate Aboriginal groups, who are not objecting
19 to the Project, also occurs on this trapline.

20 Furthermore, individual or commercial
21 impacts, like those on Mr. L'Homme-court's trapline,
22 are dealt with through Shell's trapper compensation
23 program.

24 Impacts on ACFN's collective rights must be
25 considered at the community level.

1 Dr. Candler's assessment also suffers from
2 other methodological shortcomings. For example,
3 Dr. Candler explained that habitation sites could
4 represent different physical sites used for
5 habitation or they could represent multiple
6 references to the same site from different
7 interview participants. For example, 25 habitation
8 sites could mean 25 different cabins or it could
9 mean one cabin that 25 different people visited
10 over the course of years. That makes no sense in
11 attempting to assess what the impact on the use of
12 lands for traditional purposes is. His study area
13 also excludes the Wood Buffalo National Park and
14 other areas in the vicinity of Fort Chipewyan that
15 are used by ACFN members.

16 This overrepresents the effects of the
17 Project on ACFN traditional land use.

18 Finally, Dr. Candler estimated that about
19 10 percent of the ACFN community uses the Project
20 area, even though he could only confirm 12 ACFN
21 members that reported using the area, and
22 Dr. Candler's assessment does not distinguish
23 between active frequent use of an area and one-time
24 users of the area.

25 The ACFN witnesses were asked if their use of

1 the Project area is unique. And they responded
2 that it was.

3 However, there's no evidence to support that
4 conclusion. When asked for a list of resources
5 that have been harvested in the Project footprint,
6 the ACFN witnesses did not identify any resources
7 that do not exist elsewhere throughout the region
8 and ACFN's traditional territory.

9 Furthermore, the ACFN traditional territory
10 is approximately 4.4 million hectares. Their
11 Consultation Area is approximately 245,000 square
12 kilometres or 24.5 million hectares, an area nearly
13 the size of Italy.

14 Meanwhile, the entire ACFN community is about
15 1,000 individuals, which includes a substantial
16 number of members living in places like Edmonton.
17 Which means that each ACFN individual has in excess
18 of 200 square kilometres to exercise their rights.

19 The Project is also located roughly 150
20 kilometres south of ACFN's main reserve, outside of
21 ACFN's homeland area. The Project is already
22 surrounded by existing oil sands development,
23 which, according to ACFN's own depiction of
24 disturbance put forward by Dr. Komers, means that
25 the Project area itself is already disturbed and

1 not available for use.

2 ACFN has characterized this area as not being
3 prime land.

4 ACFN's evidence supporting the Bennett Dam
5 inquiry suggests the ACFN TLU was focused on the
6 ACFN reserves near Fort Chipewyan prior to the
7 dam's construction only a few decades ago. During
8 that inquiry, one ACFN Elder testified that he had
9 never trapped off ACFN Reserve 201. Others
10 testified that all their families' needs were
11 obtained exclusively from the reserve. ACFN's
12 position during that inquiry was that the Bennett
13 Dam had changed water flows to the Peace-Athabasca
14 Delta and that forced members to change their
15 patterns of traditional land use.

16 In addition, the area identified by the ACFN
17 as their homeland area is surrounded by parks and
18 conservation areas created under the LARP,
19 including the Richardson Backcountry area, which
20 was referred to as important use area by ACFN
21 members during the hearing.

22 There are no petroleum and natural gas rights
23 or forestry agreements in that area.

24 To suggest that this Project will result in
25 significant effects on the exercise of the entire

1 ACFN community's Aboriginal and Treaty Rights is
2 not supported by the facts.

3 With respect to the MNA, Mr. Fortna critiqued
4 Shell's assessment of likely effects of the Project
5 on TLU on the basis that it gave insufficient
6 weight to historic land use by Métis. His
7 submission presents a history of Métis families in
8 the general region of the proposed Project that
9 attempt to show that traplines currently held by
10 non-Aboriginal trappers such as RFMA-2331 were
11 previously held and used by Métis families.
12 Mr. Fortna's approach to critiquing the Shell EIA
13 is problematic for two reasons:

14 First, the TLU assessment was done to
15 determine the Project's effects on current
16 traditional land uses, not historic ones. For
17 example, Mr. Fortna indicated that RFMA 2331, which
18 has been held by a non-Aboriginal trapper for more
19 than 20 years, was previously held by a
20 Mr. Ducharme, a Métis trapper. While the history
21 of the trapline's ownership is of interest for
22 historical reasons and potentially for a rights
23 claim, the fact remains that Mr. Ducharme no longer
24 holds the trapline and will not be affected by the
25 Project.

1 Furthermore, while Mr. Fortna believes the
2 Shell EIA is lacking for failing to consider the
3 history of trapline ownership, he failed to provide
4 any specific evidence that RFMA 2331 is being used
5 by Mr. Ducharme or any other Métis person for
6 traditional activities.

7 Second, Mr. Fortna's emphasis on historical
8 use of the region by Métis is consistent with the
9 general thrust of the MNA Region 1 and Métis Locals
10 concern that they had been ignored by the Province
11 of Alberta in the government's consultation
12 guidelines and their desire to be treated more like
13 First Nations. Shell has never disputed that Métis
14 may have Aboriginal Rights in the Project area.
15 For the purposes of this Project, Shell assumed
16 that the rights existed and consulted with all
17 potentially affected Métis Locals and the MNA.

18 Again, evidence of historic use does not
19 demonstrate that any Métis individuals' or
20 communities' current use of the land for
21 traditional purposes will be affected by the
22 Project.

23 Like ACFN, the MNA Region 1 witnesses were
24 asked if they used the Project area in a way that
25 was unique. And they suggested that they do.

1 However, also like ACFN, the evidence does not
2 support that conclusion. While several of the MNA
3 Region 1 witnesses testified that they currently
4 use lands in the region for traditional purposes,
5 all of these lands are considerably to the north of
6 the Project. Similarly, the *Mark of the Métis*
7 atlas that MNA Region 1 filed during the hearing
8 contains a variety of maps showing Métis Local 1935
9 traditional land use sites, and with the exception
10 of a single moose-hunting site in the vicinity of
11 the Project, no other TLU sites in the LSA were
12 identified.

13 For the Métis Local 125, like ACFN, their
14 home community of Fort Chipewyan is located roughly
15 150 kilometres north of the Project and is
16 surrounded by parks and conservation areas created
17 under LARP. While Shell's assessment assumed
18 members of Local 125 used the Project area, there
19 is no evidence to suggest that this Project will
20 result in significant effects on the exercise of
21 that community's rights in the region.

22 Several communities also raised concerns
23 about land use in the vicinity of the proposed Red
24 Lake compensation lake. While the plans for this
25 lake are still being developed in conjunction with

1 regulators and Aboriginal groups, any terrestrial
2 disturbance effects are predicted to be negligible.
3 The purpose of the lake is to create a healthy and
4 functional lake that will be used by fish, wildlife
5 and traditional land users. The fish community
6 selected for the compensation lake incorporated
7 First Nations and Métis input to identify species
8 that were important to them as a fisheries
9 resource.

10 Finally, the ACFN has requested that the
11 Project should not be approved until a traditional
12 land and resource use management plan or
13 traditional use plan for ACFN is put into place.
14 The traditional use plan would identify the
15 resources and associated thresholds and criteria
16 required to support the practice of ACFN rights
17 currently and into the future. ACFN witnesses
18 stated that developing this plan would take
19 approximately two years.

20 So, Mr. Chairman, to be clear, Shell is not
21 opposed to ACFN's traditional land use plan
22 proposal. However, the traditional land use plan
23 is designed to manage cumulative effects throughout
24 the region, and as such, the development of this
25 proposal should involve governments and all of

1 industry. It should also take into account the
2 rights and traditional land uses of other
3 Aboriginal groups, not just the ACFN. This is a
4 considerable task, and the words of Ms. Nicholls,
5 has a lot of variables. While Shell is willing to
6 participate along with other industry participants
7 to explore the traditional land use concept, it has
8 provided extensive evidence on how Aboriginal
9 traditional and resource use was assessed for this
10 Project and why the Project will not result in
11 significant effects.

12 In these circumstances, it would be
13 unreasonable to delay the approval of this Project
14 indefinitely until such time as the traditional
15 land use plan is finalized and put into place.

16 Two final and related issues are impacts of
17 the Project on Aboriginal culture and
18 socio-economic impacts on Aboriginal groups.

19 ACFN filed a review of the Socio-Economic and
20 Traditional Land Use Assessments for the Project in
21 February of 2010 which expressed concerns about
22 Shell's assessment of socio-economic and Aboriginal
23 Rights impacts on ACFN. Shell provided detailed
24 responses to that review in May of 2011. Shell
25 also conducted a cultural effects assessment at the

1 request of First Nations who expressed concerns
2 that Shell had not addressed the cultural effects
3 information that was included in the studies
4 provided, and as well as the assessment of the
5 socio-economic impacts on Aboriginal groups.

6 Both of these assessments were included in
7 Shell's May 2012 Submission and included Aboriginal
8 community input from a variety of sources including
9 the consultations carried out by Shell and studies
10 and reports prepared by or on behalf of the
11 Aboriginal groups in the area.

12 The scope of Shell's assessments regarding
13 cultural effects and socio-economic impacts on
14 Aboriginal groups was provided to ACFN in August of
15 2011 at their request, and ACFN declined to
16 comment. However, following submission of the
17 assessments in May 2012, ACFN raised concerns with
18 the methodology used. As a result, Shell provided
19 funding to ACFN to review this supplemental
20 information, conduct a gap analysis of the
21 information available, and collect supplemental
22 cultural and socio-economic information. ACFN
23 filed their review of these assessments in its
24 October 1st filing.

25 The purpose of Shell's cultural effects

1 assessment was to take the cultural information
2 that Aboriginal groups had provided in their TLU
3 studies and provide an assessment of the cultural
4 effects of the Project. Shell's cultural
5 assessment determined that the effects of the
6 Project on tangible and intangible elements of
7 culture will range from negligible to moderate.
8 Many of the effects were considered small, such as
9 Project-related effects to the availability of
10 land, availability of wildlife habitats, ability to
11 pass on traditional knowledge, and Project-related
12 effects on language retention, and increases in
13 non-Aboriginal population.

14 The larger effects were assessed to be
15 Project-related effects to visual aesthetics, which
16 was in effect wilderness character, and a sense of
17 solitude. However, none of these effects were, in
18 Shell's view, considered to be significant.

19 With respect to Shell's assessment of the
20 socio-economic effects on Aboriginal groups,
21 Shell's assessment shows that Aboriginal people and
22 communities in the region lead many other
23 Aboriginal communities in the country in terms of
24 income, community well-being index, and housing
25 quality and quantity. However, Aboriginal

1 communities in the region continue to trail the
2 regional population as a whole in these indicators.

3 Shell recognizes that oil sands development
4 in general has contributed to a number of
5 socio-economic pressures on Aboriginal communities
6 such as increasing social stressors, psychosocial
7 effects, and pressures on local services and
8 infrastructures.

9 But Shell also noted that oil sands
10 development has provided a number of benefits, such
11 as increased wages and benefits, increased
12 employment and business opportunities, increased
13 access to education and training opportunities, and
14 increased access to a broader range of local
15 services and infrastructure.

16 These are regional issues that are not the
17 result of any one project and should not be the
18 responsibility of any one project proponent to
19 solve.

20 For its part, however, Shell is committed to
21 taking a number of actions to minimize the stresses
22 and maximize the benefits from its Project on
23 Aboriginal communities. Those actions include:
24 Providing financial and inkind contributions for
25 local community social groups, education

1 institutions, and healthcare providers, supporting
2 Dene gatherings, Elder youth programs, language
3 retention initiatives, and video documentation of
4 traditional knowledge. It includes supporting
5 historical preservation initiatives such as the
6 Fort Chipewyan museum, working with industrial
7 relations corporations and employment coordinators
8 to identify and remove barriers to employment
9 wherever possible, and carrying out a
10 fly-in/fly-out program for workers living in Fort
11 Chipewyan which allows Aboriginal individuals to
12 continue to practice traditional living while
13 participating in the wage economy and avoid the
14 high costs of housing in Fort McMurray.

15 ACFN hired several experts who submitted
16 reports addressing cultural and socio-economic
17 effects on the ACFN community. The first,
18 Dr. McCormack filed a detailed research report on
19 the ethno-history of the ACFN community and how the
20 ACFN culture has been impacted over time. During
21 the hearing Dr. McCormack also challenged the
22 approach that Shell took in its cultural
23 assessment.

24 The second ACFN expert, Dr. Larcombe, filed a
25 narrative of encroachment which explains various

1 pressures on the ACFN community through history and
2 up to the present.

3 While this submission discusses oil sands
4 development generally, it does not address any
5 specific impacts from the Project.

6 Finally, Mr. MacDonald with the Firelight
7 Group filed a supplemental social, economic and
8 cultural effects submission for the Project to
9 address perceived gaps in the Shell Assessment.
10 This report discussed cumulative effects on the
11 ACFN community over time and into the future
12 primarily based on the perceptions of the ACFN
13 community members.

14 Mr. MacDonald and Dr. McCormack both
15 critiqued Shell's cultural and socio-economic
16 assessments on the basis of a lack of participation
17 by the First Nation groups in the Assessment and a
18 lack of ethnographic and ethno-historical
19 information.

20 Mr. Chairman, these criticisms are unfounded.
21 Shell's Cultural Assessment was led by a qualified
22 cultural anthropologist who has conducted dozens of
23 social impact assessments including for past
24 projects in the oil sands.

25 Also, in conducting its cultural and

1 socio-economic assessments, the authors drew on a
2 variety of sources including consultations carried
3 out by Shell with First Nations and Métis groups in
4 the regions, and reports that were prepared by the
5 First Nations themselves or by their consultants.

6 Furthermore, Shell's Cultural Assessment
7 focused on potential effects of the Project. It
8 was not intended to address cumulative impacts on
9 Aboriginal culture over time, which is beyond the
10 scope of an EIA for a single project.

11 As a result, Mr. Chairman, while the reports
12 of Dr. McCormack, Dr. Larcombe and Mr. MacDonald
13 may be interesting in understanding the history and
14 challenges of the ACFN community, they do not
15 assist the Panel in understanding the potential
16 impacts of this Project on Aboriginal culture or
17 communities.

18 Finally, Shell's Assessment also acknowledged
19 the benefits of initiatives that oil sands
20 developers have made to validate Aboriginal culture
21 and support retention of aspects of culture,
22 initiatives that were ignored by Mr. MacDonald and
23 Dr. McCormack and which are important in
24 understanding how potential effects of the Project
25 and culture may be mitigated. For example, Shell

1 supports numerous cultural retention initiatives in
2 the region which aim at helping Aboriginal
3 communities to maintain their social cohesion and
4 unique characteristics. Many of these initiatives
5 have focused specifically on the communities of
6 Fort McKay, Fort Chipewyan and Fort McMurray. This
7 demonstrates that Shell is committed to doing its
8 part to help address regional issues that are
9 caused by cumulative effects of oil sands
10 development which would otherwise not exist.

11 So let me turn now to socio-economic issues
12 which is an area that was raised by the ACFN and
13 it's consultant Firelight, OSEC, and the Regional
14 Municipality.

15 To be clear, these issues are not specific to
16 the Project, but are broader issues associated with
17 oil sands development over the past several
18 decades. This is reflected in the fact that the
19 Regional Municipality is not opposing this Project,
20 but rather, is raising broader cumulative concerns
21 with the Provincial Government primarily in
22 relation to the availability of developable land,
23 transportation and traffic, and work camps. In
24 addition, many of the socio-economic concerns
25 raised by Chief Adam of the ACFN, such as high food

1 prices, are issues common to many northern
2 communities and are not directly a result of the
3 Project.

4 Oil sands development has brought challenges
5 to the region. There's no doubt about that. But
6 it has also brought substantial benefits.

7 The Provincial Government has made a number
8 of investments in recent years to address many of
9 these concerns. Socio-economic issues like
10 affordable housing, infrastructure, education and
11 health care, are the responsibility of the various
12 levels of government. Government, not industry, is
13 best equipped to respond to the social needs of the
14 people allowing businesses to do what they do best,
15 which is to provide economic opportunity and wealth
16 to society.

17 The Joint Review Panel for the Muskeg River
18 Expansion Project confirmed that local
19 infrastructure and capacity are the
20 responsibilities of governments, not project
21 proponents, and that the panel did not have the
22 mandate to resolve pre-existing socio-economic
23 issues.

24 Having said that, Shell works actively with
25 various levels of government and regional planning

1 initiatives in funding innovative solutions to
2 resolve the regional issues that have been raised
3 in this proceeding.

4 Shell also invests in the communities
5 affected by its operations. For example, Shell has
6 spent more than one billion dollars on Aboriginal
7 contractors and businesses in the Athabasca Region
8 in the last six years.

9 Shell has also spent millions of dollars on
10 local community infrastructure and programs like
11 daycare centres, health care, education and social
12 programs.

13 Finally, Shell has entered into a Memorandum
14 of Understanding with the Regional Municipality
15 that will allow Shell to support the Municipality's
16 efforts in addressing regional socio-economic
17 issues.

18 In addition, the billions of dollars that
19 will be invested in capital expenditures for the
20 Project will result in direct benefits to the local
21 communities and the country through increased
22 employment, income, contractor revenue, and
23 government revenue.

24 The bottom line is that Shell proactively
25 engages in the issues within its control. It has

1 supported and will continue to support community
2 initiative aimed at improving the quality of life
3 for residents in the region.

4 Let me talk briefly about a few specific
5 issues. The first being housing.

6 OSEC and ACFN have raised concerns regarding
7 supply and affordability. It is no secret that
8 housing in Fort McMurray is both expensive and in
9 short supply. However, Shell is doing what it can
10 to mitigate potential effects of the Project on
11 housing. For example, Shell will operate a
12 construction camp for the duration of construction
13 for the Project which will include recreation,
14 health care and leisure facilities and services, as
15 well as a fly-in/fly-out approach for transporting
16 workers in and out of the region, thus reducing the
17 need for temporary housing in Fort McMurray and
18 taking pressure off the housing market.

19 During Project operations, Shell will abide
20 by the Regional Municipality's desire that
21 operational workers reside in the community as
22 permanent residents and it will not use an
23 operations camp.

24 Government authorities continue working
25 towards addressing housing issues in the region.

1 Since 2007, the Government of Alberta has invested
2 more than \$50 million in affordable housing in the
3 region. As well, several planning initiatives have
4 been completed or are underway to make sufficient
5 land available for residential and other uses in
6 the various communities in the region, such as the
7 Provincial Government's commitment of \$241 million
8 to develop lands in the Parson's Creek and Saline
9 Creek plateau areas. The most significant of these
10 is a assigning of a Memorandum of Understanding
11 between the Province and the Regional Municipality
12 for the creation of an Urban Development Subregion
13 which will enable the Municipality to keep pace
14 with the demand for residential, commercial,
15 industrial, and institutional land.

16 In terms of impacts on the school system,
17 Shell has voluntarily taken steps to address
18 various issues related to the education system in
19 the region. Examples include:

20 Providing ongoing support for e-learning in
21 Fort McKay;

22 Supporting other Aboriginal education
23 initiatives identified by schools in Fort
24 Chipewyan, Fort McKay and Fort McMurray;

25 Supporting Keyano College through financial

1 donations including funding to open a new campus in
2 Fort Chipewyan;

3 Supporting Aboriginal scholarships through
4 contributions to the National Aboriginal
5 Achievement Foundation and environmental education
6 of Aboriginal students in the region;

7 Bringing science and technology camps and
8 workshops to Fort Chip and Fort McKay through
9 ACTUA;

10 Delivering drilling rig and driver training
11 in Fort Chipewyan;

12 Sponsoring delivery of the Building
13 Environmental Aboriginal Human Resources Program in
14 Fort Chipewyan;

15 And implementing environmental monitoring
16 programs and training to allow local workers to
17 take advantage of job opportunities available in
18 the oil sands industry.

19 Chief Adam's testimony also raised concerns
20 about health care. Shell acknowledges that health
21 care service providers in the region face a number
22 of challenges including difficulty in recruiting
23 and retaining health care professionals and the
24 need for additional regional health infrastructure.

25 However, progress has been made on a number

1 of fronts over the past few years in addressing
2 these challenges. Examples of this progress
3 includes:

4 An additional \$177 million in funding that
5 was provided to the Northern Lights Health Region
6 between 2007 and 2010 to address regional health
7 related growth pressures;

8 Additional doctors that have been recruited
9 to the area, the fact that emergency department
10 wait times have been reduced, and investments in
11 regional health infrastructure that have been made.

12 To further mitigate any impacts of its
13 operations on regional health services, Shell is
14 committed to the following:

15 Establishing an onsite health care facility
16 at the Albian Village site that provides 24/7
17 onsite primary emergency and occupational health
18 service;

19 Continuing to provide financial contributions
20 to the Northern Lights Health Foundation where
21 appropriate, including \$1.2 million to the Inner
22 City Health Initiative;

23 Working with other industrial proponents to
24 address the cumulative socio-economic effects of
25 their projects on the region. This includes

1 ongoing discussions with Alberta Health Services
2 about medical infrastructure and services needs,
3 and how industrial proponents might contribute to
4 addressing those needs.

5 Concerns were also raised about traffic in
6 the region and specifically traffic on Highway 63.
7 Shell has committed to taking a number of steps to
8 minimize Project effects on the local road network,
9 including the following:

10 Using construction camps at the Project site;

11 Using the Albian Sands Aerodrome as the
12 primary conduit for transporting construction
13 workers;

14 Busing Fort McMurray-based Project workers on
15 a daily basis;

16 And scheduling construction truck traffic,
17 including oversized loads, during off-peak hours.

18 Shell has also committed to working with
19 other developers in the region to address
20 transportation issues outside of its control, this
21 includes Shell's participation in the Oil Sands
22 Development Group Transportation Committee to
23 ensure continued awareness of all discussions
24 related to highway safety and improvements.

25 On the Province's part, there has been a

1 commitment to twin Highway 63 south of Fort
2 McMurray. A five-lane bridge across the Athabasca
3 River in Fort McMurray has been constructed. And
4 construction of interchanges at the intersections
5 of Thickwood Boulevard and Confederation Way with
6 Highway 63 were completed in 2011.

7 Lastly, the long-range planning for future
8 road improvements in the Wood Buffalo region
9 continues. The Alberta Oil Sands Sustainable
10 Development Secretariat, in cooperation with a
11 number of Alberta government departments and local
12 area municipalities, has developed the Athabasca
13 Oil Sands Area Comprehensive Regional
14 Infrastructure Sustainability Plan, CRISP, which
15 lays out the infrastructure requirements, including
16 highways, required for future scenarios in which
17 the Athabasca oil sand region produces six million
18 barrels per day of bitumen.

19 In addition, a new advisory committee called
20 the Athabasca Oil Sands Area Transportation
21 Coordinating Committee has been created comprised
22 of municipal, provincial, and industry
23 representatives, who review and make
24 recommendations on current and future
25 transportation needs in the region.

1 Let me now turn to the role of the Province
2 and the Regional Municipality of Wood Buffalo in
3 addressing these regional concerns or issues.

4 Since the Municipality and other regional
5 service providers began raising socio-economic
6 concerns at regulatory hearings in 2006, the
7 Province has contributed \$3.6 million over three
8 years to provide strategic municipal planning
9 support to the region.

10 It's provided \$103 million in direct funding
11 in addition to a \$136 million four-year
12 interest-free loan to build a replacement
13 sewage-treatment facility and an upgraded water
14 treatment plant in Fort McMurray.

15 \$30 million to support the lower town site
16 water collection system upgrader.

17 \$15 million for regional landfill
18 development.

19 \$33.4 million for the Keyano Sports and
20 Wellness Centre.

21 \$54 million for the Wood Buffalo Housing and
22 Development Corporation.

23 \$10 million plus land for the construction of
24 the south cell block and station.

25 And they've contributed another \$52 million

1 for Phase I of the new RCMP Detachment in
2 Timberlea.

3 Further, while the region may be experiencing
4 rapid growth and its accompanying pressures, it is
5 also experiencing unprecedented tax-base growth.
6 Property assessment in the Rural Service Area of
7 the Regional Municipality, which consists mostly of
8 oil sands facilities, grew by an average of
9 24 percent per year from under \$6 billion in 2005
10 to more than \$24 billion in 2011.

11 For its part, the Project will contribute for
12 annual property tax payments estimated at between
13 23 and 34 million dollars, assuming current rates,
14 while Project-related activities will have minimal
15 effect on municipal costs.

16 These property tax payments will be in
17 addition to the more than \$50 million in annual
18 property taxes already paid by Shell for its
19 existing facilities in the region.

20 During its presentation to the Panel, the
21 Regional Municipality emphasized its 20-year
22 Municipal Development Plan and the various
23 initiatives it is taking to respond to issues in
24 its communities, including moving forward with
25 investments of upwards of \$2 billion in such things

1 as its downtown redevelopment and transit corridor.
2 The Municipality also demonstrated that it is
3 attempting to engage with its provincial
4 counterparts on priority issues such as land
5 availability and transportation, though it
6 expressed concerns with the Province's lack of
7 responsiveness.

8 While shortfall may remain, the Municipality,
9 the Province and Shell, are all taking steps to
10 address these regional issues.

11 Mr. Chairman, the last topic that I'm going
12 to deal with today relates to Project operation
13 issues primarily raised through questioning from
14 Panel and Board staff.

15 Let me first talk about tailings.

16 The first of these issues is tailings
17 management. In 2009, the ERCB released *Directive*
18 *074*, which requires all oil sands mining operations
19 to capture a minimum percentage of fine tailings
20 and ensure that tailings disposal areas achieve a
21 minimum undrained shear strength of 5 kilopascals
22 within a year of deposit and 10 kilopascals within
23 five years of deposit.

24 This will ensure that tailings disposal areas
25 have the strength, stability and structure

1 necessary to establish a trafficable surface within
2 five years after active deposition has ceased.

3 In December 2010, Shell received approval for
4 its ERCB *Directive 074* compliant Jackpine Mine
5 Tailings Management Plan. The plan included
6 detailed information on the management of tailings
7 in the Jackpine Mine - Phase I Project area,
8 including the construction and operation of sand
9 cells, dedicated drying areas, densification, and
10 the start-up and operation of end pit tailings
11 using non-segregated tailings technology.

12 This plan includes the use of tailings
13 thickeners which have not achieved expected solids
14 content in the fine stream to date at the existing
15 Jackpine Mine, but this will be upgraded through a
16 project that Shell is currently in the process of
17 implementing.

18 The plan also includes the use of atmospheric
19 fines drying which has been used successfully at
20 Shell's existing operations, and centrifuge
21 technology which is currently being demonstrated at
22 the commercial scale.

23 Shell has provided detailed information to
24 the Panel describing how the expansion tailings
25 management plans align with existing approved plans

1 to ensure continued compliance with *Directive 074*.

2 Shell has continued to actively collaborate
3 with other industry participants through
4 initiatives such as the Oil Sands Tailings
5 Management Framework that is currently under
6 development in a collaborative effort between ESRD
7 and CAPP industry members and COSIA.

8 Shell has also played a proactive role in the
9 formation of the Oil Sands Tailings Consortium, or
10 OSTC, whose members include the seven primary oil
11 sands mining companies who together have invested
12 approximately \$500 million into tailings research
13 and new tailings technology.

14 In 2011, OSTC companies dedicated \$75 million
15 to support additional tailings research.

16 These efforts will lead to continued
17 improvements in tailings technology and will ensure
18 that the entire industry works together to share
19 successes and address this important industry-wide
20 issue.

21 A specific issue with respect to tailings
22 management for this Project related to the
23 placement of mature fine tailings, or MFT, into end
24 pit lakes. This was a feature of Shell's original
25 application but was raised as a key concern by most

1 Aboriginal groups. Shell's Muskeg River Diversion
2 Alternative involves removing all MFT from end pit
3 lakes which requires a combination of centrifuges
4 in conjunction with in-pit placement of MFT. While
5 removal of MFT from pit lakes will certainly
6 improve pit lake water quality from that of a lake
7 with MFT, outstanding concerns about final
8 distribution of process-affected water from the
9 centrifugation process into end pit lakes was also
10 raised at the hearing. When questioned on this,
11 experts from Natural Resources Canada confirmed
12 that Shell's plans for managing this remnant water
13 in the end pit lakes was an appropriate method.

14 The Board staff also asked questions of
15 Shell's track record regarding bitumen recovery in
16 relation to the Board's Interim Directive 2001-7.
17 Shell acknowledged that historically there have
18 been challenges meeting the bitumen-recovery
19 targets at the Muskeg River Mine. This is an issue
20 that Shell is currently working through with the
21 Board and that Shell is taking steps to address.
22 Mr. Mayes detailed all these changes during the
23 hearing.

24 The Jackpine Mine was designed to incorporate
25 several improvements over the Muskeg River Mine

1 design in terms of bitumen recovery, including a
2 longer conditioning pipeline, primary separation
3 cell design improvements such as improved feed
4 distribution, and froth underwash and increased
5 flotation capacity.

6 These design improvements have resulted in
7 improved performance relative to the Muskeg River
8 Mine, and according to Mr. Mayes, Shell's current
9 data indicates that the Jackpine Mine is expected
10 to exceed the ID 2001-7 requirements for 2012.

11 Shell is also planning further capital
12 investments over the next several years to further
13 improve bitumen recovery, and the Project will
14 benefit from those investments.

15 In summary, Shell has committed to complying
16 with the Board's bitumen recovery targets and its
17 recent success at the Jackpine Mine demonstrates
18 its ability to perform in this regard.

19 A further operation issue is solvent
20 recovery.

21 In extracting bitumen from the oil sands,
22 Shell first uses hot water and then applies a froth
23 treatment which includes a solvent which separates
24 the bitumen from other constituents. The froth
25 treatment tailings are processed in the tailings

1 solvent recovery unit, or TSRU, to recover more
2 than 99 percent of the solvent and to comply with
3 ERCB criteria of limiting solvent losses to less
4 than four parts per thousand parts of bitumen
5 produced by volume.

6 For this Project, Shell has committed to not
7 discharge any untreated TSRU tailings during plant
8 operations. Solvent recovery performance is an
9 area where the Muskeg River Mine had difficulties
10 in its earlier years due to equipment reliability
11 issues, but since 2008, all of Shell's oil sands
12 operations have been fully compliant with the
13 Board's solvent recovery requirements.

14 In addition, to the extent that solvent
15 reaches Shell's tailings ponds, Mr. Martindale
16 explained that Shell has conducted testing for two
17 years to determine whether solvent in the tailings
18 ponds could have adverse effects on waterfowl that
19 come into contact with it, and it has not
20 identified any adverse effects.

21 During the hearing, Board counsel asked
22 questions regarding the placement of discharge from
23 the TSRU tailings piping into the tailings ponds.
24 For the Muskeg River Mine, Shell was originally
25 required to discharge the TSRU tailings in a

1 subaqueous manner a minimum of three metres below
2 the surface of the tailings pond. This is also the
3 method of discharge that Shell is applying for in
4 this Project Application.

5 Subaqueous discharge was imposed as an
6 approval condition in the Muskeg River Mine as a
7 result of concerns from the Fort McKay First Nation
8 that surface discharge of the TSRU tailings would
9 cause increased odour emissions. Compliance with
10 this approval condition however resulted in
11 operational challenges such as ice formation at the
12 surface and freezing in the tailings piping.

13 Shell conducted trials in 2010 with tailings
14 discharge subaerially on to exposed tailings beach
15 and these trials identified no discernible
16 increases in odour emissions. As a result, Shell,
17 with the support of Fort McKay, applied to the
18 Board for approval of subaerial discharge of its
19 TSRU tailings and this was approved in 2011.

20 Monitoring of odour emissions from the Muskeg
21 River Mine tailings ponds will occur for several
22 years to confirm that subaerial discharge is not
23 causing odour problems at site or at Fort McKay.
24 If this monitoring confirms that subaerial
25 discharge is successful, Shell will apply to the

1 ERCB for subaerial discharge arrangement for the
2 Jackpine Mine as well.

3 The issue of asphaltene rejection was also
4 raised during the hearing. Asphaltene rejection is
5 the mechanism in the paraffinic froth-treatment
6 process that removes water and fine solids
7 contaminants from bitumen. The extent of
8 asphaltene rejection affects the extent of
9 contaminant removal and thus the higher rate of
10 asphaltene rejection, the higher quality of bitumen
11 produced. At its existing operations, the current
12 design basis for the high temperature
13 froth-treatment process is to reject less than
14 10-weight-percent asphaltene based on bitumen
15 production on an annual basis. During the hearing,
16 Shell accepted that same limit for this Project.

17 In terms of lease boundary issues, which were
18 raised by Syncrude in submissions leading up to the
19 hearing, as well as by Board counsel during
20 cross-examination, Shell has committed to working
21 with all adjacent leaseholders to address any lease
22 boundary issues that may arise. Shell currently
23 has cooperation agreements with both Syncrude and
24 Imperial and is working with those companies to
25 coordinate reclamation and watershed drainage.

1 To the extent that issues cannot be resolved
2 between the parties, disputes will be brought to
3 the ERCB for adjudication.

4 A specific lease boundary issue that arose
5 during the hearing was a modification of the south
6 external tailings disposal area at the existing
7 Jackpine Mine. While this modification was
8 included in the original Application for the
9 Project, the footprint for the modification was
10 included in the original Jackpine Phase I approval.
11 Shell has now applied for this modification
12 separate from this Project Application as part of
13 its *Directive 074* filings, which have yet to be
14 approved by the Board. Based on its existing
15 approval conditions for the Jackpine Mine, Shell
16 will work with adjacent leaseholder Syncrude to
17 reach an agreement on the appropriate design and
18 setbacks for this modification of the south
19 tailings disposal area, which minimizes ore
20 sterilization and forms the basis of a final
21 submission to the Dam Safety Branch of ESRD and to
22 the ERCB.

23 The next issue relates to Devonian risks and
24 Cell 2A that occurred at the Muskeg River Mine in
25 October of 2010. This was an incident that ACFN

1 asked a number of questions about and they
2 expressed concerns about the risk of a similar
3 event occurring for the proposed Project.

4 In his response to ACFN's questions,
5 Mr. Mayes explained that the Cell 2A incident was
6 the first event of its kind in the oil sands
7 45-year history of large-scale mining in eight
8 different mine pits. Mr. Mayes also explained that
9 despite the fact that Cell 2A was an entirely
10 unforeseen occurrence, it was effectively contained
11 to the mine pit and at no time was there any
12 release or any threat of a release to a surface
13 watercourse.

14 As a result of the Cell 2A incident, Shell
15 has committed to carrying out geological surveys at
16 its current mines to develop a complete
17 understanding of the Devonian geology in the area
18 so that Shell can identify areas of potential risk
19 within the Muskeg River Mine and Jackpine Mine
20 footprints.

21 Shell has also developed a process for
22 assessing and managing any risks that are
23 identified. If the Project is approved, Shell is
24 committed to carrying out this same risk assessment
25 for the Project to ensure that the likelihood of an

1 event such as Cell 2A is remote in the future.

2 The final operations issue I would like to
3 briefly touch on is the issue of accidents and
4 malfunction.

5 Shell provided details about a variety of
6 potential accidents and malfunctions and the likely
7 environmental consequences of each in its response
8 to the Panel's Supplemental Information Request 33
9 in May of 2012. None of the potential scenarios
10 were concluded to be likely.

11 The Sierra Club Prairie has focused their
12 intervention on the safety of tailings pond dams
13 and ensuring that these do not fail. Mr. Roberts
14 explained during the hearing that a tailings dam
15 failure would be very serious, and as a result,
16 huge efforts are in place to ensure that failure
17 does not occur. These efforts include designing
18 dams to meet Canadian Dam Safety Association
19 Guidelines, and the Mining Association of Canada's
20 Tailings Management Protocols, conducting regular
21 independent audits, and monitoring dam stability on
22 a 24/7 basis. Based on these measures, a tailings
23 dam failure was concluded to be remote.

24 Mr. Chairman, in conclusion, Shell's evidence
25 is that there is not likely to be any significant

1 environmental effects caused by this Project that
2 cannot be mitigated. The benefits of this Project
3 to local communities, Alberta and Canada are
4 significant, and the negative effects, most of
5 which are regional issues, can all be managed with
6 the initiatives that are already in place or that
7 are underway and which Shell is committed to
8 supporting.

9 We ask that you approve the Project as the
10 ERCB and as the CEAA Joint Review Panel, we ask
11 that you recommend that this Project is not likely
12 to cause any significant adverse environmental
13 effects that cannot be mitigated.

14 Based on the evidence before the Panel, Shell
15 urges the Panel to approve the Project.

16 Mr. Chairman, you and the other Panel Members
17 can be confident that Shell's Expansion is in the
18 public interest and that it will continue to be a
19 leader in the development of this world class oil
20 sands resource.

21 Thank you for your time and attention over
22 the last three weeks.

23 Particularly, I would thank the Court
24 Reporter for her incredible patience with me this
25 morning.

1 And if there are any questions, I'm happy to
2 give it a try.

3 THE CHAIRMAN: We have no questions,
4 Mr. Denstedt. Thank you.

5 MR. DENSTEDT: Thank you, sir.

6 THE CHAIRMAN: We'll take our lunch break
7 and resume at 2:00 p.m. It would be helpful to the
8 Panel if counsel could huddle with Mr. Perkins and
9 prepare a rough schedule for the balance of the
10 argument so we know how to plan. Thank you.

11

12 **(The Luncheon Adjournment)**

13 **(The Hearing Adjourned at 1:00 p.m.)**

14 **(The Hearing Reconvened at 2:00 p.m.)**

15

16 THE CHAIRMAN: Good afternoon, everyone.
17 Thank you for your estimates. So we have a time
18 management problem, but we'll proceed and take a
19 reading at about 5 o'clock and decide what to do.
20 In the meantime, I've asked our reporter,
21 Ms. Nielsen, to feel comfortable in advising if
22 anyone's going at too great a clip, so you can
23 expect that.

24 Mr. Roth for Syncrude.

25

1 **FINAL ARGUMENT OF SYNCRUDE CANADA LTD., BY MR. ROTH:**

2 MR. ROTH: Good afternoon, Mr. Chairman,
3 Members of the Panel. I have, or actually
4 Ms. Ladha of our firm has e-mailed to the court
5 reporter a copy of our argument and I plan to stick
6 to it very closely. However, what I would request,
7 if it is acceptable to the Panel, I think the same
8 as what Mr. Denstedt requested, that footnotes,
9 references to the footnotes -- Ms. Ladha has been
10 here over the past couple of weeks and did a very
11 diligent job in footnoting and referencing my
12 argument. And what's she's also done is put some
13 headings. And I'd ask that those appear in the
14 transcript as well, if that's acceptable to the
15 Panel.

16 THE CHAIRMAN: It is, sir.

17 MR. ROTH: Mr. Chairman, I was happy to
18 get Mr. Perkins's letter on Friday providing an
19 issues list for final argument. I had not yet
20 started to draft argument, and Mr. Perkins's list
21 provided me with a very useful structure for
22 argument. Not only did Mr. Perkins provide me with
23 the structure for my final argument, but as you
24 will hear, when I get into the substance of some of
25 the issues I will address, I'll be relying on his

1 cross-examination for clarity that it brought to
2 the record on the principal issue that brought
3 Syncrude to this hearing.

4 Before I get to the issues list, however, I
5 would like to discuss the two core regulatory
6 principles that underlie Syncrude's argument on
7 each issue that I will address today.

8 The first is the principle of equity. Equity
9 underpins why the ERCB has a public hearing mandate
10 that is being fulfilled through this Joint Review
11 Panel process. Equity demands that if a person's
12 rights could be directly and adversely affected by
13 a regulatory decision, that person has the right to
14 be heard. They also have the right to be provided
15 with notice as to how their rights may be affected.

16 It is adherence to this fundamental principle
17 by the ERCB, its predecessors, and regulatory
18 tribunals that may assume its mandate in the
19 future, which has allowed Alberta to attract the
20 breadth and depth of investment necessary to
21 develop its world-class energy resources.

22 The second core regulatory principle I will
23 address is conservation. As its name suggests,
24 resource conservation is central to the Energy
25 Resources Conservation Board's public interest

1 mandate. The Board exists to ensure that the
2 energy resources that we are endowed with in this
3 province are not wasted. Over the years, this
4 mandate has evolved to include conservation more
5 generally, including the equally important
6 objective of conserving our resources in the
7 natural environment. The Board currently shares
8 this responsibility with Alberta Environment and
9 Sustainable Resource Development.

10 As I proceed to discuss the specific issues
11 identified by the Panel from its issues list for
12 final argument, it should become clear that these
13 two regulatory principles of equity and
14 conservation are not competing principles. In this
15 case, they work together to arrive at outcomes that
16 are both fair and in the overall public interest.

17 Syncrude's argument starts with the specific
18 issues identified under paragraph 4.c. of the
19 issues list. It was the first item on this list,
20 Sand Cell 2 ETDA expansion, that caused Syncrude to
21 file its intervention.

22 Syncrude has been trying to resolve the issue
23 of the offset of Shell's south ETDA for quite some
24 time. As noted in Shell's Application and again in
25 its Opening Statement, Shell had requested an

1 amendment to the approval of the south tailings
2 facility for Jackpine Mine from that which was
3 originally approved by the Board as part of its
4 Jackpine Mine Application. Shell, however, had
5 filed its Amendment Application back in 2007, prior
6 to the Board's issuance of *Directive 074*.

7 When Syncrude tried discussing Shell's
8 proposed expansion and extension of its south
9 tailings facility footprint in proximity to
10 Syncrude's lease boundary, Shell responded by
11 saying the ERCB had already approved the extension.

12 Leading up to this hearing, Syncrude thought
13 that it had managed to convince Shell otherwise
14 through its intervention which went into the
15 details of exactly what was and was not approved by
16 the Board. Syncrude then exchanged correspondence
17 with Shell in which Syncrude agreed not to pursue
18 this particular issue during the course of the
19 hearing in exchange for, and only after, Shell had
20 agreed with Syncrude that it would not be asking
21 for any approval of its expanded South ETDA at the
22 hearing until Shell and Syncrude could reach an
23 equitable agreement on managing the resources on
24 the south ETDA boundary with Syncrude's lease in
25 accordance with the objective of conservation.

1 Syncrude was surprised to then hear Shell
2 during the course of the hearing suggest or imply
3 that the reason it did not need approval of its
4 expanded tailings area and offset from Syncrude's
5 lease through this Application was because it had
6 already applied for such through a different
7 process and believed that the Board had given that
8 approval or at least had no concerns with what
9 Shell had proposed.

10 During the course of cross-examination by
11 Mr. Perkins, it became clear that Shell was relying
12 on its Annual Mine Plans and *Directive 074*
13 submissions to suggest that the Board had already
14 approved the amended configuration of its south
15 tailings facility.

16 Now, at the outset of my argument, I had
17 suggested that I have something to thank
18 Mr. Perkins for other than his issues list.
19 Syncrude is grateful for his follow-up on the
20 undertaking response provided by Shell on the
21 offset that it believed was approved from
22 Syncrude's lease boundary. By the end of
23 Mr. Perkins's cross-examination, the record was
24 clear. Shell has now conceded that it does not
25 have approval for its expanded tailings area and

1 amended setback and it is not seeking such approval
2 in this Application.

3 There is much more work to be done in order
4 to ensure that the principles of equity and
5 resource conservation are achieved in the location
6 of Shell's south tailings facility. The
7 information that had been provided in support of
8 Shell's Application and the information provided in
9 its successive *D074* submissions, did not allow for
10 any reasoned decision to be made based on these
11 principles.

12 Shell has committed to work with Syncrude to
13 resolve these matters and bring the results of that
14 work back to the Board for its consideration and
15 ultimate approval. Syncrude is also willing to
16 participate in such process and is in fact reliant
17 on this process.

18 This takes me to the second item under the
19 specific issues identified in paragraph 4.c. under
20 the issues list dealing with MFT at closure end pit
21 lakes.

22 Syncrude submits that this is another area
23 where parties are confused regarding the intention
24 behind *Directive 074*. There are some who argue
25 that the Board, in issuing *Directive 074*,

1 foreclosed the use of end pit lakes for the
2 treatment of MFT as part of reclamation.
3 Mr. Chairman, Members of the Panel, this makes no
4 more sense than for Shell to claim that it obtained
5 regulatory approval for its south tailings facility
6 through the *Directive 074* submission process.
7 Regarding the principle of equity, it would mean
8 that Syncrude's approved Reclamation Plans that
9 rely upon end pit lakes are based on decades of
10 research and careful planning along with hundreds
11 of millions of dollars of investment have
12 effectively been amended without any hearing
13 process.

14 Water capping of MFT is the most researched
15 reclamation technology that currently exists to
16 deal with MFT. No other technology has a higher
17 degree of certainty. Further, as even
18 Dr. Schindler admitted, if the technology works as
19 it is designed to, it would be preferable to
20 alternative reclamation options that have far
21 greater energy and surface land requirements. For
22 reasons of equity and resource conservation,
23 *Directive 074* cannot reasonably be interpreted to
24 abandon or in any way affect the use of end pit
25 lake technology to address inventories of MFT or

1 other soft tailings products produced by all
2 current mining and extraction processes.

3 That takes me to paragraph 4.e. of the issues
4 list that directly deals with end pit lakes. The
5 first issue in this paragraph is identified as
6 "Risk uncertainty of strategy: Syncrude
7 demonstration lake."

8 I have already stated that more research has
9 been done and there's more certainty with respect
10 to water-capping MFT than any other reclamation
11 technology for soft tailings. People like
12 Dr. Miller and Dr. Schindler come to this hearing
13 and suggest to you that end pit lake technology is
14 based on modelling and modelling alone and there's
15 no certainty in modelling. They have not, however,
16 gone through the realtime data that exists from
17 decades of research from Syncrude's test lakes.
18 Not knowing their size, Dr. Schindler calls them
19 small. Although it is true that they are smaller
20 than the base mine lake, they are large facilities
21 that provide decades of valuable data that neither
22 Dr. Miller nor Dr. Schindler have reviewed.

23 As I suggested to Dr. Schindler in my
24 questioning of him, there was a voluminous record
25 already back in 1993 regarding the state of the

1 science of end pit lake technology. He did not
2 look for this information or review any of it, and
3 expressed relief that he did not have to sit
4 through the longest hearing in the history of the
5 oil sands.

6 In my questioning of Dr. Schindler, we
7 discussed at some length the science of limnology
8 and the analytical tools used by that science.
9 Syncrude's research and demonstration of end pit
10 lake technology uses the very analytical tools that
11 Dr. Schindler confirmed formed the basis of the
12 science of limnology.

13 Syncrude's initial conceptual approval of
14 water-capping MFT in end pit lakes was based on
15 years of data derived from large-scale test
16 facilities. From the data derived from these
17 facilities, Syncrude and others developed models
18 and we are now at the point of validating this work
19 through Syncrude's Base Mine Lake demonstration
20 project. It is essential in the public interest
21 that this important research and validation
22 continue to completion.

23 Dr. Schindler speculated that the reason that
24 Syncrude's approval for the base mine lake was
25 conceptual was because of uncertainty associated

1 with it. That is not correct. The reason that
2 approval is conceptual is because of the
3 jurisdictional mandates of Alberta Environment and
4 Sustainable Resource Development and the ERCB. The
5 conceptual approval is an ERCB approval. It is
6 Alberta Environment and Sustainable Resource
7 Development that is responsible for the ultimate
8 approval of all forms of reclamation, including end
9 pit lakes.

10 Syncrude has been working with Alberta
11 Environment for years on the Base Mine Lake
12 Demonstration Project. Syncrude requires approval
13 from Alberta Environment and Sustainable Resource
14 Development to conduct its Base Mine Demonstration
15 Project under the **Water Act**, and, ironically, DFO
16 required that Syncrude apply for a HADD
17 authorization in order to divert water from
18 Syncrude's Beaver Creek diversion system into the
19 base mine lake to provide the water cap.

20 The reason I say it is ironic, is that at
21 pre-development, Beaver Creek did not sustain any
22 fish populations of significance. Syncrude's
23 diversion system, in the opinion of DFO, provided
24 fish habitat that had to be compensated because it
25 lowered water levels in the diversion system that

1 Syncrude had constructed. This resulted in an
2 approximate two-year approval process. When
3 Dr. Schindler suggests that even if end pit lakes
4 work, they will eliminate creeks and streams that
5 constitute fish habitat, he is wrong. Oil sands
6 operators have already created this type of habitat
7 and will continue to do so as part of the drainage
8 plans that will incorporate end pit lakes.

9 Syncrude agrees with Dr. Schindler's
10 recommendation regarding the need for a number of
11 end pit lakes to be constructed and studied. As
12 Dr. Schindler suggests, each lake will be unique.
13 Dr. Schindler agreed that within a couple of
14 decades we will have the data needed to confirm the
15 success of Syncrude's Base Mine Lake. This will in
16 turn lead to further demonstration of the
17 technology at Syncrude's north mine and again, with
18 success there, at Aurora North. Each lake,
19 however, will be unique and must be successful.

20 The next item under paragraph 4.e. of the
21 issues list dealing with end pit lakes is
22 contingency options.

23 Contingency options were a requirement of
24 Syncrude's conceptual approval of end pit lakes.
25 During the 1993 hearing, work was just commencing

1 on consolidated tailings technology. A decade
2 later, this technology was commercially proven.
3 Then, well before the issuance of *Directive 074*,
4 Syncrude started working on centrifuging
5 technology, which was discussed by Mr. Roberts in
6 questioning by the Panel. Centrifuging is a viable
7 contingency option for end pit lakes with MFT. It
8 would not, however, be a contingency option for
9 other forms of soft tailings reclamation
10 technologies in the event that they do not deliver
11 a trafficable landscape. The fact is that the best
12 understood reclamation technology for soft tailings
13 is water capping and it is also the technology that
14 is best suited for the application of contingency
15 options.

16 The next item under paragraph 4.e. is
17 liability management for end pit lakes.

18 There is a legal response to this issue as
19 well as a practical response. And the two are
20 related.

21 Starting with the practical response, oil
22 sands mining will continue for decades. On a
23 number of occasions, Shell has indicated that the
24 expanded Jackpine Mine has more than a 40-year
25 reserve life. Syncrude is just completing its

1 investment made as part of Syncrude 21 that
2 involved investing billions of dollars, not only
3 for further upgrading capacity but in retrofitting
4 existing upgrading capacity to address acid-gas
5 emission concerns.

6 These significant investments have been made
7 in a reliance on mining approvals that Syncrude
8 currently holds at Mildred Lake, Aurora North and
9 Aurora South. At its current rate of production,
10 Syncrude will be producing and utilizing its
11 significant upgrading facilities for decades to
12 come. Not only does this accommodate progressive
13 reclamation using end pit lakes, it assures the
14 financial capability to see that reclamation
15 through to a successful conclusion.

16 This practical response is related to the
17 legal answer because the reality of valuable oil
18 sands reserve back-stopping reclamation success is
19 at the heart of the mine liability management
20 system that has been recently adopted and was
21 spoken to by Mr. Broadhurst in questioning by the
22 Panel.

23 Moving on to the last item under
24 paragraph 4.e. that I will address on behalf of
25 Syncrude, we arrive at the issue of the CEMA

1 guidelines applicability and suitability.

2 Mr. Cooke, your question of Shell's witness
3 panel made this a very important issue. You've
4 apparently been struggling to understand why
5 Syncrude would not have endorsed guidance provided
6 through CEMA. The fact that Syncrude would have
7 reservations about this guidance seems to have
8 undermined your confidence in end pit lake
9 technology.

10 To understand the letter Syncrude submitted
11 in respect of CEMA's guidance document, one must
12 understand the history of CEMA. Although it is a
13 science-based organization, it is also one that is
14 constituted by multiple stakeholders that have
15 their own perspectives. There's government,
16 industry, First Nations, environmental
17 organizations. Given that CEMA has been a
18 consensus-based organization, there have been
19 occasions upon which compromise is sought in order
20 to obtain consensus. There would be a number of
21 participants in CEMA who may be the same groups and
22 organizations that interpret *Directive 074* as
23 abandoning end pit lakes as a reclamation option
24 for soft tailings. This bias on the part of some
25 members of CEMA led to an implication in the

1 document that the introduction of MFT into end pit
2 lakes posed additive risks. There is absolutely no
3 science behind any such implication or suggestion
4 and it is one of the concerns Syncrude voiced in
5 its comments to explain its concerns with the CEMA
6 document.

7 This is what Syncrude is responding to in its
8 letter. The Panel Secretariat put this question to
9 Dr. Schindler directly. He pointed out that end
10 pit lakes will have to contend with surface and
11 groundwater that encounters products of tailings
12 streams which will have to be managed in any event.

13 No one knows the science of end pit lake
14 technology better than the scientists who work for
15 and with Syncrude. When Syncrude expressed
16 reservations regarding CEMA's science document, it
17 was based on its experience. To the extent that
18 CEMA guidance document can in any way be
19 interpreted as suggesting that the risk of
20 proceeding with end pit lake technology is
21 increased by water-capping MFT, Syncrude submits
22 that the science simply does not support those
23 taking that view. Just as *Directive 074* does not
24 prejudge Syncrude's Base Mine Lake Project, neither
25 should the CEMA guidance document.

1 In conclusion, the core regulatory principles
2 that instruct and guide regulators, industry, and
3 government, are equity and resource conservation.
4 All regulations, directives, and guidance documents
5 must be developed based on these fundamental
6 principles. Once they are written, they must be
7 interpreted using these principles, and, if
8 necessary, they must adapt in order to meet these
9 principles. The ERCB and its predecessors have a
10 long history of responsibly applying these
11 principles to both conventional oil and gas
12 resources, and now, for almost 50 years, the oil
13 sands.

14 Regulators, governments and industry all at
15 times face pressure that could cause them to want
16 to stray from these principles, we do so, however,
17 at our peril. It is adherence to these principles
18 that has made the oil sands industry not only
19 commercially viable, but one of the most
20 significant energy resources in the world. The oil
21 sands industry has attracted investment and
22 long-term commitment from the world's leading
23 energy companies. This in itself has substantially
24 mitigated the historical, technological, and
25 environmental risks, that the industry has had to

1 confront.

2 Not so many years ago, there were those that
3 insisted that the oil sands would never be a
4 commercial success. Not many of those sceptics
5 remain. They have, however, been replaced by
6 sceptics that suggest the oil sands industry,
7 working with government and its regulators, will
8 not achieve reclamation success. Experience has
9 shown that the vigour of these sceptics will surely
10 dissipate with time.

11 Those are my submissions. Thank you very
12 much, Mr. Chairman, Members of the Panel. If you
13 have any questions, I would be happy to respond.

14 THE CHAIRMAN: We have no questions,

15 Mr. Roth. Thank you.

16 MR. ROTH: Thank you.

17 THE CHAIRMAN: Ms. Buss for Fort McKay First
18 Nation.

19

20 **FINAL ARGUMENT OF THE FORT MCKAY FIRST NATION AND FORT**
21 **MCKAY MÉTIS COMMUNITY ASSOCIATION, BY MS. BUSS:**

22 MS. BUSS: Good afternoon, Mr. Chairman,
23 Members of the Panel, staff, and the other counsel
24 and parties in the room.

25 My first order of business is to file an

1 amendment to Fort McKay's pre-hearing submission.
2 And I took the liberty of providing copies to the
3 Panel during the break and to my friends at Shell,
4 as well I have an extra copy for Board counsel.

5 And so this exhibit is a replacement for the
6 Requested Disposition section in Fort McKay's
7 Exhibit 009-008. And I'm wondering, Mr. Chairman,
8 if we might have this filed. I believe it will be
9 Exhibit 009-011.

10 THE CHAIRMAN: Yes, it is.

11

12 **EXHIBIT 009-011: REPLACEMENT FOR THE REQUESTED**
13 **DISPOSITION SECTION IN FORT MCKAY'S**
14 **EXHIBIT 009-008**

15

16 MS. BUSS: Now I've also provided the
17 court reporter with my speaking notes, which
18 include references to the evidence which I will not
19 be repeating in oral submissions but ask that that
20 be inserted into the transcript. And I may also
21 deviate from my speaking notes, in which case I ask
22 that my verbal comments take precedence.

23 Mr. Chairman, I'm also not going to read into
24 the record the Requested Disposition in order to
25 save time, but I am going to speak to why we're

1 asking for that disposition and specifically the
2 recommendations, what evidence you have to rely
3 upon in meeting our request, and just briefly
4 highlight some points in the evidence that we would
5 like you to be cognizant of.

6 So, firstly, why does Fort McKay seek these
7 recommendations? Fort McKay would find it very
8 helpful for the Panel to make the recommendations
9 requested because both Canada and Alberta's
10 consultation frameworks and policies rely, in part,
11 upon the findings and recommendations of this
12 Panel, or panels like yourselves. Therefore, in
13 order to be eligible for further consultation or
14 meaningful consultation on regional impacts, there
15 needs to be some reference to it or some
16 requirement or recommendation in the Panel's
17 decision in order for Canada particularly to pay
18 attention to it, but Alberta is also following that
19 general practice.

20 And a second reason is, frankly, Fort McKay
21 has not been able to get either government to pay
22 attention to the increasing regional impacts and
23 need for accommodation with respect to Treaty and
24 Aboriginal Rights of the community, although we
25 have asked numerous times.

1 So what evidence does the Panel have to
2 support the request for recommendations? First of
3 all, we have the Fort McKay Specific Assessment,
4 which wasn't able to be filed because it's very
5 large, but it was part of Shell's Application
6 pursuant to an agreement made between the parties
7 in 2008. It itself is a detailed Environmental
8 Impact Assessment of impacts directly as they
9 relate to the community. It includes a
10 pre-development baseline, cultural baseline study,
11 cultural impact assessment, as well as the
12 traditional categories of Environmental Impact
13 Assessment like air, water and so on.

14 Secondly, there's the Environmental Setting
15 Report, which is in the 2007 Environmental Impact
16 Assessment Section 3.3.1, which documents
17 traditional land use by Fort McKay.

18 Thirdly, there is a Fort McKay First Nation
19 Traditional Knowledge Report from 2008 prepared on
20 behalf of Shell filed as part of the Application.

21 So these latter two reports, both extensively
22 document Fort McKay's traditional land use and
23 practices and the use of natural resources in the
24 Regional Study Area. And then in Volume 5 of the
25 EIA, Section 8.3 is an assessment of the impacts or

1 some assessment of the impact on those rights and
2 activities.

3 Shell's Cumulative Effects Assessment and
4 Assessment of Impacts on Aboriginal Communities
5 filed in May of this year also provides helpful
6 information to the Panel. And these documents rely
7 in part on the Fort McKay Specific Assessment as
8 their source of information.

9 And then, finally, you also have information
10 about the increasing environmental impacts and
11 changes to the land which is contained throughout
12 Shell's Assessment.

13 Next I'm going to highlight just a few
14 aspects of the impacts identified in evidence
15 before the Panel. I expect that much more detail
16 will be highlighted by other parties, so I don't
17 want to repeat that.

18 But I do note some things for you to pay
19 attention to. One originally comes from Shell's
20 Cumulative Effects Assessment in May 2011 in answer
21 to an SIR from the Panel. That contains in Table
22 2.5-1 a calculation of the direct land and
23 disturbance in the Regional Study Area with respect
24 to Fort McKay. And it shows that from the
25 Pre-Industrial Case, of which there was

1 approximately 1700 hectares of direct disturbance,
2 that's changed in the 2012 Base Case to 674,968
3 hectares; that constitutes an increase of
4 31 percent in the intensively-used cultural areas
5 of Fort McKay, and 29 percent of the moderate-use
6 areas.

7 Table 3.5-1 of the same document shows
8 disturbances to traplines in the Local Study Area,
9 which form a component of the overall Fort McKay
10 traditional land use and trapping area. Of the
11 four traplines specifically mentioned, three
12 currently belong to Fort McKay members, that's
13 1716, 2137, 2172.

14 And then the area of the traplines affected
15 in the JPME Application and the Planned Development
16 Case is the same: 57 percent, 53 percent and
17 63 percent respectively.

18 Now, if you look at the evidence, you will
19 see that trapline 1714 is included as a Fort McKay
20 trapline in the Fort McKay Specific Assessment and
21 in two Traditional Land Use Studies filed by Shell
22 that I referenced.

23 These documents indicate that at the time
24 that these assessments and reports were prepared,
25 trapline 1714 was registered to Annie L'Hommeccourt,

1 who was a Fort McKay First Nation member, but she's
2 now deceased. So that explains that discrepancy
3 for the Panel.

4 Now carrying on in that same document, the
5 next section deals with changes from the Base Case
6 to Planned Development Case. And you'll see in
7 there that the changes to Fort McKay's traditional
8 area due to land directly disturbed for all types
9 of traditional land use is a total increase from
10 31 percent to 36 percent for the PDC, and for
11 moderately-used areas, the increase is 29 percent
12 to 37 percent in the PDC.

13 Table 3.5-5 shows disturbance to traditional
14 plant-harvesting areas will increase from
15 47 percent to 55 percent for the intensively-used
16 areas, and 31 to 42 percent for the moderate-use
17 areas.

18 That's going to be all the figures that I'll
19 cite to you.

20 But I would ask is that you also consider
21 that these disturbance numbers need to be put in
22 perspective because they are direct disturbance.

23 As Shell noted in its November 2011
24 Traditional Land Use Update Report, its assessment
25 of the significance of impacts did not include the

1 value placed on resources by Aboriginal persons,
2 but, and I quote (as read):

3
4 "Agencies responsible for
5 making public-interest decisions
6 should be aware of the value placed
7 on these resources by local users
8 as part of their decision-making
9 process."

10
11 Fort McKay agrees with that statement, and
12 that is why it provided, or partly why, it provided
13 the Fort McKay Specific Assessment because it helps
14 everyone, including the Panel, understand how land
15 and resource-use patterns are affected by regional
16 development and how that ties into the cultural
17 identity and values of the community.

18 Now, the Fort McKay Specific Assessment
19 looked at what they're calling the 40 Township
20 area, which is Townships 93 to 100 and Ranges 8 to
21 12. And that's located within Shell's RSA.

22 And that area was chosen in part because it
23 represented all of the traditional land use area
24 that was reasonably accessible from the community.

25 Now, of that area, at the time that the data

1 for the Fort McKay Specific Assessment was
2 collected in 2007, so even though the report is
3 dated 2010, so these numbers are underestimating
4 current impacts. But in any event, it showed that
5 133,000 hectares was estimated to be disturbed in
6 the Planned Development Case, as it was known in
7 2007. Of course it would be greater now. But what
8 was important was that 91 percent of these
9 disturbances occurred within the moderate or
10 intensively used areas of Fort McKay's traditional
11 land use, or TLU area. And all of it occurred on
12 Fort McKay's, or the same 91 percent applied to it
13 occurring on Fort McKay traplines.

14 Now, the other important perspective is that
15 the direct disturbance numbers in the cumulative
16 impact assessment prepared by Shell relates to
17 direct impacts only. It does not include loss of
18 access and indirect disturbance. For example, you
19 know, the zone of influence we heard about for
20 wildlife, which, you know, is somewhere around 500
21 metres around for example a mine site, it does not
22 include the loss of trails. In the 2007 Planned
23 Development Case, the Fort McKay identified or the
24 Fort McKay Assessment identified 107 kilometres of
25 trails would be lost, which is 38 percent. And

1 that doesn't capture the whole effect because if
2 you take out a significant chunk of a trail,
3 obviously it's like a road, you take out the middle
4 and the two end bits aren't very useful to you.

5 And I also would direct your attention to the
6 2008 TEK study as well as the Fort McKay Specific
7 Assessment filed by Shell, because that provides
8 you a description of the actual difficulties
9 experienced by Fort McKay members.

10 You can see from any map that because the
11 community is surrounded by development that it's
12 going to require circumvention of large mine sites
13 in order to access certain areas. Fort McKay
14 members also spoke about difficulties, even getting
15 lost on the land, because the landscape has changed
16 so much and not being able to find their way with
17 the traditional trails gone and land disturbed.

18 The other important piece of information for
19 the Panel to be cognizant of when considering Fort
20 McKay's request is the loss or declining wildlife.
21 The Traditional Environmental Knowledge report
22 filed by Shell documents that Fort McKay members
23 have observed declining population levels,
24 particularly in lynx and moose.

25 Now, wildlife populations are not monitored

1 regularly in the region, and we submit that this is
2 quite a significant gap.

3 However, there has been some recent studies
4 by Alberta Sustainable Resource Development and
5 these are described, some of these are described in
6 Shell's Updated Moose Population Viability
7 Assessment.

8 Now, Shell's own assessment admits that
9 there's evidence of declining moose populations.
10 For example, the survey of Wildlife Management Unit
11 531, which is about 50 percent of that or so is
12 within the Regional Study Area, indicated a decline
13 of 60 percent in the population between 1994 and
14 2009.

15 Exhibit 017-030 is another moose survey done
16 for Wildlife Management Unit 530, which again is
17 around half of which is in the RSA, and it also
18 showed declining population levels as compared to
19 past surveys.

20 And interestingly, that document notes that
21 SRD planned surveys to be done every five years but
22 they continue to be underfunded, which I guess
23 accounts for their scarcity.

24 Now, the lack of wildlife population counts
25 for the region underscores the important point that

1 simply pointing to an absence of evidence does not
2 equate with absence of effects. It just means that
3 the monitoring is inadequate.

4 Now, the other exhibit that was filed was an
5 excerpt from Dover, the Dover Project, an
6 Environmental Impact Assessment, which also
7 predicted a significant -- sorry, this wasn't a
8 study, this was a prediction -- decrease in habitat
9 for moose, black bear, and snowshoe hare. But the
10 Dover Project is on the west side of the river, and
11 we just point that out because one cannot assume
12 that wildlife populations are going to be available
13 in the far reaches of Fort McKay's traditional
14 territory.

15 Now, we also point out that this evidence of
16 declining wildlife in the region is not surprising.
17 It's entirely consistent with the predictions from
18 the research and modelling that was done by CEMA
19 for the Terrestrial Effects Management Framework in
20 2007.

21 Now, I turn back again to the issue of
22 significance assessment. Fort McKay's Assessment
23 of Significance to the Impact to its Culture and
24 Way of Life is included as an Appendix to
25 Exhibit 001-088. It's called the "Cultural

1 Heritage Baseline."

2 Interestingly, Shell prepared its own
3 Cultural Heritage Assessment, which referred in a
4 number of instances to Fort McKay's Specific
5 Assessment but did not refer to the conclusions or
6 the actual assessment of impacts. And it makes no
7 reference to the methodology, either.

8 But in a nutshell, I can explain that the
9 Cultural Heritage Baseline looked at cultural
10 values that were expressed and maintained through
11 cultural activities and through what might be
12 called "project mitigation," such as participation
13 in industry jobs and more educational
14 opportunities.

15 Nevertheless, it concluded, based on erosion
16 in community values, that regional development was
17 having a significant and adverse effect.

18 Now, on the other hand, Shell's assessment
19 found no significant effect for the regional impact
20 on culture or Aboriginal people and it only found
21 one moderate effect, which was to visual impacts
22 and noise.

23 Now, the reason for the difference is the
24 methodology used by Shell's consultant was simple:
25 It concluded because the Project site only made up

1 1.0 percent of the total of this very large
2 Regional Study Area used in this Impact Assessment,
3 therefore any changes could only be contributed to
4 by 1.0 percent. So no matter what changes were
5 going on around, the impact was insignificant from
6 the Project. So that's how they went about it.

7 Now, why I point out this methodology, which
8 this Panel or Members of the Panel have seen many
9 times, is that this takes us back to Fort McKay's
10 reason for asking for the recommendations from the
11 Panel. Every project EIA says its contribution to
12 regional effects are not material because each
13 project's contribution is 1 or 2 or 5 percent of
14 the total because the total area is big. And
15 getting bigger. As projects get bigger, the
16 reference area is bigger.

17 Now, what that means is that no single
18 operator is responsible for the large-scale
19 landscape change and resources change that are
20 going on, but it doesn't negate the fact that they
21 are going on.

22 Now, if you listen carefully to, which I'm
23 sure you did, Alberta and Canada's submissions on
24 consultation, it was important to note what they
25 didn't say. The only post-hearing consultation

1 that they referred to was in relation to the
2 Project's effects and the Project's approvals.
3 Neither government mentioned a process for
4 consulting specifically on the cumulative effects
5 of regional development and their significance to a
6 specific community.

7 So nobody is consulting or addressing the
8 accumulation of all of the 1.0 percents and
9 5 percents.

10 Now, the regional effects that Fort McKay
11 identified require measures -- what I should say is
12 that are also identified in part in Shell's
13 assessment -- these regional effects require
14 measures that only government can provide and only
15 government is responsible for implementing the
16 terms of Treaty 8 and protecting Treaty and
17 Aboriginal Rights. That's why at some point the
18 government needs to come to terms. And, frankly,
19 that would help establish peace in the valley
20 because there's no doubt that these impacts are
21 going to continue.

22 Now, I know government will say and operators
23 will say that LARP is an answer, the Lower
24 Athabasca Regional Plan, is one way of dealing with
25 these regional impacts. However, if you look at

1 the conservation areas that are included in the
2 plan filed in these proceedings, you will see that
3 very little of the conserved or protected areas are
4 in Fort McKay's traditional territory. Just from
5 looking at it, you can calculate that it's roughly
6 10 percent, maybe, of the total protected areas.
7 Now, this isn't surprising considering that
8 85 percent of Fort McKay's traditional land is
9 leased for development. But that does not mean
10 that other measures are not required, there are
11 still things that could be done. The new
12 monitoring plan, for example, will hopefully
13 address the inadequacies of the present system, and
14 Fort McKay agrees it's very important to monitor,
15 but also that monitoring itself is not mitigation.
16 What it does is documents the need for mitigation.
17 Things that many of the Fort McKay members are
18 observing themselves every day and are monitoring
19 through their daily experience.

20 Now, finally, I just want to make a couple of
21 points about air quality.

22 Fort McKay is the community that's most
23 affected by emissions from the oil sands
24 development. Chapter 2 of the Fort McKay Specific
25 Assessment provides a detailed examination of

1 emission predictions as well as ambient air quality
2 trends. Admittedly it's outdated now and there are
3 some newer numbers in the more recent amendments to
4 Shell's EIA, which are entirely consistent with the
5 trends identified in the Specific Assessment, that
6 is, shows that emissions are steadily increasing
7 and air quality is deteriorating.

8 Now, there's one exception possibly which is
9 SO₂, and that's moderate, the increase in SO₂
10 emissions has moderated somewhat as a result of
11 Syncrude's desulphurization unit.

12 Now, Fort McKay is doing its best to monitor
13 the situation itself but it still relies heavily on
14 regulators and the regulators to diligently watch,
15 manage and monitor this situation so that this
16 trend doesn't continue to rise at the rate that it
17 is rising.

18 It will eventually become, well, not very
19 long in the near future, will become a significant
20 problem if it's not managed.

21 We also point out that there's a major gap in
22 the regulations and that is that there's no
23 standards for odours or a regional system to manage
24 them. And that's one of Fort McKay's requests.
25 And we ask that the Panel highly recommend that

1 this be done forthwith. We think that this will
2 bring the request up a bit in the priority for the
3 new monitoring systems.

4 So thank you very much for your attention.
5 And I think I might have made my time estimate
6 which might redeem me from being the worst time
7 estimator at this hearing. Thank you, Panel.

8 THE CHAIRMAN: Ms. Buss, I think you beat
9 your time estimate, so congratulations.

10 MS. BUSS: Thank you.

11 THE CHAIRMAN: Ms. Bishop, if you were going
12 to be three quarters of an hour or so, maybe we
13 could just take 10 minutes for the reporter.
14 Thanks.

15

16 **(Brief Break)**

17

18 THE CHAIRMAN: Ms. Bishop, would you like to
19 go ahead with your argument.

20

21 **FINAL ARGUMENT OF THE MÉTIS NATION OF ALBERTA REGION 1**
22 **AND THE INDIVIDUALS AND GROUPS NAMED TOGETHER WITH**
23 **REGION 1, BY MS. BISHOP:**

24 MS. BISHOP: I'd like to thank the Panel
25 for this opportunity to present final argument on

1 behalf of my clients. I say I'm very proud to
2 stand here today on behalf of my clients. It's
3 been a challenging and very rewarding process.
4 Challenging primarily because of the lack of
5 funding, capacity, witnesses and witness schedules,
6 volunteers, for the most part, make-up the
7 Government of the Métis Nation of Alberta.

8 But through the efforts of Region 1 and the
9 Locals, my clients have brought to you're their
10 concerns, they've brought them in a cohesive way
11 and they ask you not to ignore their hard work.

12 Capacity has been an issue. My friends at
13 Shell mention \$80,000 in CEAA funding. We advise,
14 we understand that's for two processes, and so that
15 brings us down to about \$40,000.

16 We also point out that the ERCB in history
17 has never advanced funds under *Directive 031* to a
18 Métis group.

19 The Métis as a people have a rich history of
20 independence and perseverance and I think their
21 intervention in these proceedings proves this
22 point.

23 They've worked hard. They've travelled many
24 miles. And you will see in the audience the
25 president and vice-president of the Métis Nation of

1 Alberta Region 1 who travelled in from Lac La Biche
2 today, and also Jumbo Fraser from Local 125 who
3 travelled from Fort Chip.

4 They are here to remind you that the lands in
5 the Local Study Area and the Regional Study Area
6 are their homelands and they are still used by many
7 Métis, members of the Métis Nation of Alberta in a
8 traditional way.

9 I refer you to Exhibit 010-023 and that is
10 Barb Hermansen's story. You heard from
11 Ms. Hermansen, her poignant story of the Métis
12 community where she grew up. The community that
13 spanned from Fort McMurray to Fort Chip, but
14 primarily where she grew up, on trapline 2331,
15 which is in the LSA.

16 Maps within that exhibit, Figure 4, show the
17 extensive Métis use of the area. She mentions the
18 other Métis families that she grew up with that
19 continue to trap and hold traplines in the area,
20 MacDonalds, the Grants, LaCailles. Shell's
21 argument today seeks to erase that mark of the
22 Métis, their historic and current use in the area.
23 And if not erase, seeks to ignore it.

24 Shell talks about an assessment of current
25 traditional use. My clients submit that completely

1 misses the point of their evidence. It might
2 explain why Shell's Traditional Land Use reports do
3 not mention any of the Métis historic use that my
4 clients presented to you. Nor does it take into
5 account any of the publicly-available historic
6 literature, presented to some degree by Peter
7 Fortna. None of it was included in Shell's EIA.

8 It seems as though this morning Shell
9 suggested that with the \$40,000 in CEAA funding, my
10 clients should have done a thorough review of the
11 EIA and presented that to you. And I suggest to
12 you that this misses the point. It also is not in
13 accordance with the case law from the Supreme Court
14 of Canada. And I refer you to a passage that's in
15 our submissions but it's a passage from **Haida** and I
16 just wanted to read that to you. It's reproduced
17 on page 21 of our submissions (as read):

18
19 "The Supreme Court has been
20 clear that in order for the duty to
21 consult to be engaged, the
22 Aboriginal Right does not have to
23 be proven but merely credibly
24 asserted."

25

1 And this is from *Haida*:

2

3 "The government's arguments
4 do not withstand scrutiny. Neither
5 the authorities nor practical
6 considerations support the view
7 that a duty to consult and, if
8 appropriate, accommodate arises
9 only upon final determination of
10 the scope and content of the right.

11 The jurisprudence of this
12 Court supports the view that the
13 duty to consult and accommodate is
14 part of a process of fair dealing
15 and reconciliation that begins with
16 the assertion of sovereignty and
17 continues beyond formal claims
18 resolution. Reconciliation is not
19 a final legal remedy in the usual
20 sense. Rather, it is a process
21 flowing from rights guaranteed by
22 Section 35(1) of the *Constitution*
23 *Act, 1982*. This process of
24 reconciliation flows from the
25 Crown's duty of honourable dealing

1 towards Aboriginal peoples which
2 arises in turn from the Crown's
3 assertion of sovereignty over an
4 Aboriginal people and de facto
5 control of land and resources that
6 were formerly in control of that
7 people."

8
9 And I just wanted to refer you to that
10 passage because I think for Shell to stand here as
11 a delegate of Alberta and suggest that the onus
12 should be on my clients to prove to you what the
13 use is and what the impacts are, I say that's an
14 impoverished view, and so do the Courts.

15 My clients came to this hearing and they
16 wanted to be heard. They are asking in part for a
17 Consultation Policy from the Government of Alberta.
18 They have rights protected by the **Constitution**,
19 Section 35 states:

20
21 "The existing Aboriginal and
22 Treaty Rights of the Aboriginal
23 peoples of Canada are hereby
24 recognized and affirmed. In this
25 Act, Aboriginal peoples of Canada

1 includes the Indian, Inuit and
2 Métis peoples of Canada."

3
4 And case laws define what this means,
5 specifically in **Powley**. And I just want to go
6 through **Powley** really quickly. I know my friend
7 talked about it. And I think that if you look into
8 this case, it explains why my clients are here.

9 So I just refer to page 14 of **Powley**, which
10 is Tab 1 of our Book of Authorities. Page 14,
11 paragraph 7 states:

12
13 "The inclusion of Métis, the
14 Métis Section 35 represents
15 Canada's commitment to recognize
16 and value the distinctive Métis
17 cultures, which grew up in areas
18 not yet open to colonization, and
19 which the framers of the
20 **Constitution Act, 1982** recognized
21 can only survive if the Métis are
22 protected along with other
23 aboriginal communities."

24
25 And further at paragraph 18:

1

2

"Section 35 requires that we

3

recognize and protect those customs

4

and traditions that were

5

historically important features of

6

Métis communities prior to the time

7

of effective [European] control,

8

and that persist in the present

9

day."

10

11

So in the **Powley** test, there's the discussion

12

of a number of different characteristics that

13

should be looked at. And I'll just present our

14

evidence along with the test as we go through.

15

Métis rights are contextual and

16

site-specific. And that is the first test under

17

Powley is characterizing the right. In this case,

18

the use of both the Regional Study Area and the

19

Local Study Area clearly show Métis occupation and

20

use in the LSA and the RSA. And I refer you to the

21

maps in Barb Hermansen's book and also her

22

description of the families in the area.

23

Traplines in the area at that time before

24

Bill C-31 were primarily Métis and families lived

25

on the traplines. And for Métis people, this was

1 where they lived and where they grew up, they had
2 no reserve lands.

3 The second test under **Powley** is
4 identification of the historic rights-bearing
5 community. And this is important in terms of my
6 friend's criticism of our group. There's no
7 question that there's a strong connection, based on
8 the evidence that we've provided within our
9 submissions that there's a strong connection
10 between Lac La Biche, Fort McMurray, Fort McKay,
11 Conklin, and Fort Chipewyan. The evidence that we
12 provided in historic reports establishes that there
13 is a continuous historic Métis community in the
14 area from Lac La Biche extending north of Fort
15 Chipewyan. And I refer to the historical report of
16 Frank Tuff and John Aniuik that was filed in our
17 submissions and Shell agreed could go in
18 unquestioned. This is Exhibit 010-004K. And I
19 also refer you to the work of Tereasa Maillie,
20 Exhibit 010-004C, entitled "The Métis Experience in
21 Northeastern Alberta."

22 My clients do not agree that only Fort McKay
23 and Fort Chip are historic communities. It is
24 clear that there are also historic settlements in
25 Fort McMurray, MacDonald Island and Waterways, that

1 stretched along the river past McKay and to Fort
2 Chip. This area was settled by chain migration
3 from Lac La Biche northward and this was discussed
4 in the expert reports that we provided.

5 **Powley** talks about the importance of
6 identifying the contemporary rights-bearing
7 community. And at page 17, paragraph 24, it talks
8 about how Aboriginal Rights are communal rights,
9 and this is why I felt as though it was important
10 to talk a little bit about **Powley** because it brings
11 into perspective the consultation requirements.

12 **Powley** states (as read):

13
14 "The contemporary
15 rights-bearing community must be
16 grounded in the existence of a
17 historic and present community and
18 they may be exercised by virtue of
19 an individual's ancestry-based
20 membership in the present
21 community."

22
23 So there's no question that my clients gave
24 evidence, or their witnesses gave evidence, that
25 they self-identify as Métis, they belong to

1 different contemporary Métis communities or Locals.
2 For example the evidence of Mike Guertin and Johnny
3 Grant, Barb Hermansen and her sons, all currently
4 use the area, and they all have traplines or had
5 traplines, and current leases, and I think they all
6 have current leases. Barb Hermansen, her estranged
7 husband has a lease within the Regional Study Area.

8 So these are all different users within the
9 area and they all identify to a different Local,
10 which is also evidence of a broader Métis community
11 stretching from Lac La Biche on. Mike Guertin
12 currently lives in Lac La Biche, Johnny Grant
13 associates with Fort McMurray and Barb Hermansen
14 with Fort Chip.

15 The fourth arm of the **Powley** test is:
16 "Verification of the claimant's membership in the
17 relevant contemporary community." And what **Powley**
18 says at page 19, paragraph 29 (as read):

19
20 "While determining membership
21 in the Métis community may not be
22 as simple as verifying membership
23 in for example an Indian Band, this
24 does not detract from the status of
25 Métis people as full-fledged rights

1 bearers."

2

3 And I think that's important. You know, my
4 friend raised the issue of which groups should they
5 consult. And we suggest it's not that difficult.
6 There is a Métis government. There are Métis
7 Locals. There is a government structure that
8 should be used.

9 The fifth arm of the **Powley** test is
10 identification of the relevant timeframe. And
11 **Powley** changes the test to a test of effective
12 control.

13 And we suggest in that area it was later than
14 Lac La Biche, around the 1900s, and this is
15 important as well.

16 Whether the practice is integral to the
17 claimant's distinctive culture, this is the sixth
18 arm, and I think it's clear from the evidence you
19 heard from my witnesses or my client's witnesses
20 that trapping, hunting and harvesting in the area
21 of the proposed Jackpine Mine Expansion was
22 integral to the Métis way of life. They lived
23 there. They lived off the land.

24 And contrary to what my friend said this
25 morning, there is evidence of Métis gathering,

1 fishing and hunting, specifically in the maps that
2 were entered from the *Mark of the Métis*. And those
3 were entered separately as Exhibit 010-024. And I
4 hope you'll take a look at those maps because,
5 contrary to what my friend said this morning, there
6 is documentation of berry gathering, plant
7 harvesting, fishing and hunting in the area of
8 McLennan Lake and also around the mouth of the
9 Firebag River.

10 Continuity is important in the **Powley** test,
11 and you heard from my clients that they currently
12 use the area, currently exercising those rights.

13 Now, this the eighth arm of the test,
14 determination of whether or not the right was
15 extinguished, clearly there's no extinguishment of
16 the Métis rights in the area. There's no Treaty.
17 Arguably, my clients still hold commercial hunting
18 and fishing rights in the area.

19 Section 9 of the **Powley** test states if
20 there's a right, determination of whether there is
21 an infringement. And the **Kelly** case, which is an
22 Alberta case, states that the lack of recognition
23 of Métis rights is in itself an infringement. And
24 that **Kelly** case is also within our Book of
25 Authorities, Tab 9, and I refer you to

1 paragraph 64.

2 And the last arm of the **Powley** test, which is
3 important here as well, is determination of whether
4 the infringement is justified. And my friend
5 suggested that that's what we're here to discuss
6 today.

7 On the record there's no evidence of any
8 investigation of Métis use in the area, there's no
9 TLU or TK in the area with respect to the evidence
10 that you heard from my clients. And I just want to
11 point you to some of the transcript references, and
12 the evidence of Mr. Goodjohn.

13 In Volume 4, page 651, I asked Mr. Goodjohn
14 about the importance of looking at historical use
15 of traplines. And he responded at line 21:

16

17 "In response to your
18 question, before you do move on, I
19 just want to make clear that what
20 we're trying to understand is the
21 effects to the trapline and
22 traditional activity as it's
23 occurring today..."

24

25 And I think that this misses the point in

1 terms of what rights we're looking for in terms of
2 **Powley** and what traditional use actually is.

3 I asked him on page 652, line 4, if he knew
4 that trapline 2331 was formerly owned by Edmond
5 Ducharme, and he said he wasn't aware of that, he
6 had spoken only to the current owner.

7 And at the time, I also asked about trapline
8 1716, which, before his death, was held by a Fort
9 McKay Métis member who Mr. Goodjohn had called a
10 Fort McKay First Nation member.

11 Mr. Goodjohn went on to agree that he did not
12 look at any of the historic Métis literature, any
13 of the publicly-available documentation. He
14 mentioned that he did look briefly at the Northern
15 Rivers Basin Study, but he said at page 714, line
16 22, it was the Northern Rivers Basin Study, and
17 that includes areas, it includes the Métis people
18 in Fort Chip and it includes all residents in Fort
19 Chip in the aggregate admittedly. And he went on
20 to say that it was quite general.

21 However, you heard from Peter Fortna upon
22 review of the transcripts of that study, the
23 evidence of my clients would have come clear to
24 Shell. The use of Castor's cabin, Edmond Ducharme,
25 Barb Hermansen.

1 You might all remember the deadpan silence
2 when I asked about my client Johnny Grant. There
3 wasn't one member on Shell's panel that knew who
4 Johnny Grant was.

5 I submit to you that justification in your
6 job, if you're finding that an impact is justified,
7 it cannot occur in the complete absence of an
8 assessment of the right and impacts. Métis
9 harvesting, hunting, fishing rights exist in the
10 area of the proposed Jackpine Mine, they are
11 represented by the MNA Region 1 as agents for Métis
12 and MNA members, and we submit that they are the
13 appropriate body to do so.

14 And if you look at the case, and I hope
15 you'll have a chance to read it, the **Newfoundland**
16 **and Labrador v. Labrador Métis Nation 2007 NLCA 75**
17 in Tab 11 of our authorities. And this was a case
18 that was also discussed by Mr. Clem Chartier.

19 Shell is under the impression, so it would
20 seem, that the Terms of Reference only applied to
21 First Nations. This is documented in
22 Exhibit 010-030. And these were the meeting
23 minutes of a recent meeting between Shell and Local
24 1935. Meeting minutes that were produced by Shell
25 where they said (as read):

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"Métis Local 1935 queried the possibility of sustainability funding. Shell advised that they don't provide such funding as they aren't legislated to do so for Métis communities. Any additional supplements wouldn't be addressed with this community relations team."

This impression of Shell's that they are not legislated to deal with Métis communities, this may be as a result of Alberta's rejection of my client's Statement of Concerns and Alberta is informing Shell of this rejection, even when Statements of Concern were filed by other groups, I would suggest aren't rights-bearing. A Statement of Concern is not a heavy burden to meet. My clients did everything they should have done. They filed their Statements of Concern, they provided submissions. They even got some historical expert report. They came and they spoke eloquently about their use of the area and their experts spoke about their use in the area and the failure of Shell to

1 provide any documentary evidence from the
2 publicly-available sources or the Métis people
3 themselves.

4 I suggest to you the evidence of my clients
5 is the elephant in the room.

6 Shell tried in rebuttal to somehow equate
7 sponsorship of golf tournaments, dinner meetings,
8 and two technical presentations that my client
9 stated were too technical and they didn't find
10 helpful. And they tried to turn this into
11 consultation on Métis traditional land use.

12 Ms. Jefferson explained their approach to TLU
13 as documenting current use. This is in Volume 15,
14 page 3773 continuing on to 3774. She said:

15
16 "And so we're looking at who
17 is there currently. Who is using
18 the land currently. Who is
19 actually in the area. That is not
20 to say that a lot of this
21 information isn't really important
22 and from an historical perspective,
23 but the assessment actually deals
24 with who's there, here, and may be
25 affected."

1

2

And this is the question:

3

4

"Q. So you're saying now, you're saying who is there now, that's what Shell looked at?"

7

8

"A. That's the primary basis for an impact assessment, who may be impacted now by the project."

10

11

12

And I suggest to you that the reason that the historical use is so important, if you go back to **Powley**, you'll see that this is the approach, there is no legislated approach on how to deal with Métis rights, it comes from **Powley**. Métis rights are defined by the common law. Of course the common law interpreting the Constitution of Canada.

13

14

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18

19

In the case of Mikisew Cree First Nation and Fort McKay First Nation, providing the capacity funding to document impacts, Shell provided the capacity funding, and then entered into Impact Benefit Agreements. We've heard from Fort McKay First Nation, and we'll hear from Mikisew Cree, but they didn't participate in this hearing presumably

20

21

22

23

24

25

1 because the impacts to Aboriginal Rights were
2 documented and accommodated in accordance with the
3 Terms of Reference.

4 There can be no question that my clients have
5 credibly asserted rights. They will be impacted by
6 an approval. They are seeing the degradation in
7 the area. They are seeing their ability to live
8 off the land taken from them. They explained the
9 changes in water level, the changes in wildlife.
10 And no one can argue with the evidence, with their
11 evidence, that what was once there is no longer.
12 Who would have evidence of the changes but those
13 who experience them directly? Many, many technical
14 reports stating incrementally that these changes
15 are small with each new project did not change the
16 truth of my clients' direct observations that they
17 provided to you. They've heard decision-makers say
18 that there's no significant adverse effects, but
19 they've told you that they see significant changes.

20 Even the language of the Terms of Reference
21 suggests that Shell should have provided more
22 information about my clients.

23 And I just want to refer you quickly to the
24 Terms of Reference. And I think Mr. Denstedt
25 referred to these as well. The language of the

1 Terms of Reference speaks to accommodation and a
2 duty to consult. Page 4 of our submissions, I'm
3 restating the JRP agreement, Part III, Scope of
4 Factors.

5 And the last one I just wanted to point your
6 attention to:

7
8 "The methods and measures
9 proposed to manage, mitigate and
10 compensate to an acceptable level
11 any identified effects on the
12 asserted or established Aboriginal
13 Rights and interests."

14
15 And I would suggest to you this is impossible
16 for my clients. They have been excluded. I would
17 suggest to you even marginalized by this process.

18 The Constitution of Canada and **Powley** says my
19 clients possess rights that should be protected.
20 And I would suggest to you that's your role here.
21 And it's important. It must be done.

22 I suggest to what's happened here,
23 ironically, is that my clients who are supposed to
24 have extra protection for their rights, as they are
25 specially protected by the Constitution, they've

1 actually been afforded less consultation rights
2 than would have been afforded other stakeholders.
3 And I refer you to *Decision 2007-058* from this
4 Board. And that's the North West Upgrading
5 decision which quotes the Suncor Decision 2006-112.
6 And it states, this is page 8:

7
8 "A number of parties
9 questioned whether North West's
10 public involvement process met the
11 requirements of *Directive 056*. The
12 Board notes that *Directive 056*
13 applies directly to oil and gas
14 energy projects and not oil sands
15 upgraders. As previously noted in
16 *Decision 2006-112*, the Board
17 considers the basic elements for
18 public consultation and *Directive*
19 *056* to be the minimum public
20 participation standards that
21 mineable oil sand applications must
22 meet. The Board also considers
23 *Directive 056* to be the minimum
24 requirement for an oil sands
25 upgrader; therefore it expects an

1 applicant for an oil sands upgrader
2 to meet the consultation
3 notification requirements for
4 category E facilities in
5 *Directive 056*, Table 5.1. The
6 Board is satisfied that North West
7 has met these requirements. If
8 other information, such as the EIA,
9 indicates that parties outside the
10 minimum distances required for
11 category E facilities could be
12 impacted, the Board expects that
13 they would be part of the
14 applicant's public consultation
15 program as well."

16
17 And I would suggest to you that Mr. John
18 Grant, who came and gave evidence, is a person with
19 legally-recognized rights, legal interest in land,
20 even outside of his Métis heritage; he's a trapline
21 holder and he's also a leaseholder. The fact that
22 his trapline and access to his trapline will be
23 affected, has already been affected by some
24 projects, will be further affected by this Project,
25 *Directive 056* hasn't even been met. Nobody met

1 him. Nobody documented any conversations with him.
2 Nobody wrote it down. *Directive 056* has a lot of
3 documentation requirements.

4 So I would say ironically that the Métis, or
5 my Métis clients, have actually received less
6 consultation than even required for other
7 stakeholders.

8 Similarly, Mike Guertin and Frank LaCaille,
9 also named as interveners in their own right, and
10 also MNA members, have similar interests to John
11 Grant within the LSA and nowhere does the
12 Application mention them or their concerns; Barb
13 Hermansen as well.

14 I suggest to you that what we're seeing here
15 is a very odd result. Shell has no information
16 about Métis use specifically. Mr. Goodjohn stated
17 that there's no information about Métis Local 125,
18 their use. However, he did state, he assumed the
19 impacts would be the same as MCFN because they live
20 in the same community. I suggest to you that my
21 clients have shown that there was more Métis use in
22 the area. However, Mikisew Cree First Nation's
23 concerns have been mitigated and accommodated in an
24 Impact Benefits Agreement. My clients, however,
25 Shell says there's no Impact Benefit Agreement to

1 be had.

2 I suggest to you this is a direct result of
3 Alberta having no Consultation Policy for Métis
4 rights.

5 There are no further processes for my clients
6 after this decision is made. There's no right of
7 appeal for **Water Act**, or an approval under **EPEA**
8 where there's been a hearing by CEAA or the ERCB.
9 That's Section 95 of **EPEA**.

10 My clients are disappointed by this Panel's
11 decision before even hearing their evidence that
12 they did not want to decide or hear from my clients
13 about their constitutional rights and their duty to
14 consult. They've been left with no forum. They
15 believed, based on past experience, and, of course,
16 reading of the Notice of Hearing and reading of the
17 **Administrative Procedures and Jurisdiction Act** that
18 this is the forum where their concerns could be
19 heard.

20 Alberta, in making a motion that this Panel
21 should not take jurisdiction to consider the duty
22 to consult, has succeeded in avoiding the issue in
23 this forum.

24 I suggest to you that Shell's response, when
25 I put to them on cross, that they could have

1 provided capacity funding in order to make this
2 process easier, in order to document the impacts.
3 And their response to me, I heard a few different
4 responses. For the most part, it was that, we
5 would have provided information had the Métis
6 groups provided it to us. So then when asked about
7 capacity, Shell seemed to say, well, they didn't
8 ask for capacity. So when I showed them evidence
9 of where my clients had asked for capacity, they
10 said, well, we don't do that, that we provide Good
11 Neighbour Agreements. When asked about Good
12 Neighbour Agreements, Shell said, well, the Good
13 Neighbour Agreements are only for community-based
14 projects. They are not for oil -- they are not
15 project-specific. They are for Christmas parties,
16 they are for golf tournaments. They are for in
17 some cases they are used, and I would suggest this
18 could actually be considered double-dipping by
19 Shell, because they are used by the Locals to
20 implement community awareness programs which Shell
21 also takes credit for. So not only is the money
22 attributed to the Locals but Shell also takes
23 credit for these good works. And in all fairness,
24 the Locals are happy to work with Shell in that
25 manner, but they feel as though that funding has

1 been mischaracterized. It's not funding that's
2 provided to the Locals to use to fund their
3 organizations or to hire experts or to participate
4 in these forums. And I think the \$700,000 that was
5 quoted by my friend over six years reflects
6 \$100,000 for the *Mark of the Métis* project over
7 five years, and \$20,000 in funding for any TLU from
8 Fort Chip. So just to put those numbers in
9 perspective.

10 So I just want to finish on this note. And I
11 think Mr. Chartier summed it up quite well, and
12 also Mr. Fortna under questioning about who should
13 be consulted. It's not that hard. It's not as
14 hard as Shell makes out. It's the MNA, the
15 Regions, and the Locals are there. There's a
16 government structure. To suggest that there isn't
17 overlap between other governments, I think is
18 absurd. Obviously there's always
19 cross-jurisdictional issues between municipal,
20 provincial and regional governments. While this
21 could be the same.

22 In any event, I would suggest this morning my
23 friend misquoted Jumbo Fraser as well by saying
24 that consultation can only go through the Local.
25 And I think that's not at all what Mr. Fraser said.

1 He said that impacts need to be addressed with
2 communities, consultation needs to work through the
3 regional governments.

4 In any event, if Alberta had a Consultation
5 Policy, which was negotiated with the MNA and the
6 Region and the Locals, this would be addressed. It
7 seems unfair to put this on my clients and say, you
8 need to work all this out. It's clear that any
9 accommodation that should occur here needs to be a
10 negotiation between Alberta and my clients, and
11 ultimately with the project proponents like Shell,
12 who are, as Alberta states, and as Shell states,
13 Alberta's delegate in these processes.

14 Those are all my comments. Thank you very
15 much. If you have any questions.

16 THE CHAIRMAN: We don't have any questions,
17 Ms. Bishop, thank you.

18 Mr. Jeerakathil, did you plan on being about
19 an hour?

20 MR. JEERAKATHIL: I don't think I'll be more
21 than an hour. I might be under an hour, but I'm
22 happy to take a break now if Madam Court Reporter
23 would like one.

24 THE CHAIRMAN: We'll take 10 minutes.

25

1 (Brief break)

2

3 THE CHAIRMAN: Please proceed, sir.

4

5 **FINAL ARGUMENT OF THE FORT MCMURRAY #468 FIRST NATION, BY**

6 **MR. JEERAKATHIL:**

7 MR. JEERAKATHIL: Thank you. Good afternoon,

8 Mr. Chairman, Panel Members.

9 To begin, I have a bit of housekeeping. I
10 have a request from my client due to concerns
11 expressed in their community to redact the maps
12 contained in Exhibit 011-002, and Exhibit 011-009,
13 Figures 1 to 9, from the public portion of the
14 Registry. They would still be full exhibits on the
15 record, but just in terms of them being accessible
16 from the public that they be redacted in that
17 respect.

18 I've spoken to my friend from Shell,
19 Mr. Denstedt, and I understand that Shell has no
20 objection to that taking place.

21 THE CHAIRMAN: Any other comments with
22 respect to the motion? Mr. Perkins?

23 MR. PERKINS: We, and when I say "we," I
24 mean the Secretariat, we've seen the request from
25 Mr. Jeerakathil's client. The one concern we have,

1 sir, and I apologize that we don't have an answer
2 for you, there is an obligation under the statute
3 for an internet-based Registry to be provided in
4 relation to the hearing, sir, and we're just trying
5 to develop an understanding of whether redacting
6 evidence in the hearing, that is, not making it
7 available on that internet Registry, is something
8 that would be a problem with the statute. And I
9 wonder if we might beg your indulgence on that and
10 we'll work on it a little bit more and maybe come
11 back to you if you would be inclined to take
12 Mr. Jeerakathil's request under advisement.

13 THE CHAIRMAN: Yes, let's do that.

14 MR. JEERAKATHIL: Certainly. Thank you.

15 To begin, Mr. Chairman, the Fort McMurray
16 First Nation is a Cree and Chipewyan First Nation
17 whose traditional territory includes the area of
18 the proposed Jackpine Expansion.

19 Fort McMurray First Nation is a signatory to
20 Treaty 8, which was signed in 1899, which gives it
21 certain rights under that Treaty, and Canada has
22 made certain covenants with respect to that First
23 Nation.

24 Please be advised that the reason why the
25 Fort McMurray First Nation did not seat a panel in

1 this proceeding, even though it did file evidence,
2 was solely because of financial reasons. It wasn't
3 a reason not to participate in the process or not
4 wanting to participate in the process, but, as you
5 can gather, it's a very expensive process,
6 particularly if you want to do it correctly. And
7 certainly they could have come down unrepresented
8 and done something, but that wasn't viewed as an
9 appropriate way to participate. This is a very
10 technical and legal proceeding. And so that is the
11 reason why they didn't participate with respect to
12 a panel.

13 The Band did receive some CEAA funding but it
14 was limited, and it did not get capacity funding
15 for the studies that it did do, from the Proponent.

16 But please rest assured that we have been
17 reviewing the transcript remotely on a daily basis
18 and been participating that way in the proceeding
19 in a lower cost way.

20 With respect to the evidence on the record,
21 my friend made some comments about it. We agree it
22 is untested but we submit it should still be
23 afforded some weight by the commission. And these
24 are the reasons why. With respect to
25 Exhibit 011-002, the maps contained in that

1 Exhibit, and Exhibit 011-009, which is the report
2 that was prepared, the maps contained in that
3 exhibit, those are part of, and Shell's admitted
4 this, are part of a study that was commissioned by
5 Shell in 2006. They are the same dataset. They
6 are just points that weren't included in the 2006
7 report because it was for a more southern project.
8 So we submit that even though that evidence is
9 untested it is reliable from a hearsay perspective,
10 and is part of a document which Shell has funded in
11 the past and has been published.

12 I'm not suggesting that, you know, the
13 greater weight couldn't have been given if there
14 was cross-examination involved, but I'm saying with
15 respect to the reliability of the evidence, it is
16 reliable. And the exception, this Panel can listen
17 to hearsay, it's not bound by the Rules of
18 Evidence, particularly the Energy Resources
19 Conservation Board, Section 27 of that Act, but it
20 can rely on that evidence as reliable even though
21 it's not adopted.

22 With respect to the disturbance analysis
23 contained in Exhibit 011-009 by MSES, again we
24 would submit that even though that isn't tested,
25 there are elements of it that are reliable enough

1 for the commission or the Panel to rely on, in
2 particular the methods used to create that analysis
3 are the same as were used to create the ACFN
4 Exhibit 006-013-0. And that was subject to
5 cross-examination. So although the exhibits are on
6 the record, and not tested, I submit they are
7 reliable in that respect and the Panel could rely
8 on them if it choses to do, and, in my respectful
9 submission, should give them some weight.

10 Similarly, the affidavits of Alden Cree,
11 Exhibit 011-003, and Phillip Cheecham, 011-002, are
12 sworn statements in Affidavit form, which are
13 routinely admitted in regulatory proceedings
14 without being formally adopted because they are
15 sworn statements. Granted they haven't been tested
16 by cross-examination. I grant that.

17 And according to the Rules of Practice of the
18 ERCB, Section 16, you can receive Affidavit
19 evidence.

20 And so in my submission, they aren't untested
21 to the extent that I've described those documents,
22 they are reliable to that extent, and, in my
23 submission, have some weight for the Panel to
24 consider.

25 In our submission, Mr. Chairman, and you

1 heard some of this from my friend earlier,
2 Ms. Bishop, with respect to the Métis, I think Fort
3 McMurray is in a similar situation, although
4 they've received no capacity funding. And I'm not
5 going to talk about that a lot, but I did want to
6 say that, in our submission, this sets a low
7 watermark for Aboriginal consultation for such a
8 project of this magnitude.

9 This is a project that is \$9 billion, was I
10 think the capital cost estimate, nine to ten, nine
11 to twelve. That's a significant amount of capital,
12 no question about it. And despite that, there are
13 only, quite frankly, a handful of Aboriginal groups
14 involved here. This isn't Enbridge Northern
15 Gateway where there's 150 Aboriginal bands
16 involved. There are five First Nations and it
17 seems like one or two Métis groups. That is
18 completely achievable from an Aboriginal
19 consultation perspective. And in my submission,
20 respectful submission, Shell should have engaged
21 all of them in the appropriate way, and did not.
22 And, in my submission, this sets a low watermark.

23 The amount to spend to do a proper study in
24 this case for Fort McMurray and the Métis as well,
25 based on that kind of capital cost is rounding

1 error, it's not even rounding error, it's
2 zero percent of the cost almost. It's four decimal
3 places of a zero and then a one.

4 And it's necessary for the process. It isn't
5 up to the Bands to create the studies and then
6 bring them and then ask for further study. They
7 don't have the capacity to do that. There's a lot
8 of development going on. It's up to the Proponent
9 to study that. And the point is that Fort McMurray
10 was very willing to study that but wasn't given the
11 opportunity to.

12 With respect to the issues list, I'll move on
13 to that now, I intend to discuss Section A1, which
14 is the adequacy of Shell's assessment methodology;
15 A2, the significance of Project effects; B5, C and
16 I, terrestrial resources and cumulative effects,
17 although cumulative effects much less; and B7,
18 impacts on Aboriginal groups and consultation.

19 I notice the issues list didn't contain a
20 section dealing with alternatives to the Project
21 and I'll be making some minor submissions on that
22 as well. I may touch on other issues because there
23 is overlap. I hope to be relatively focused. To
24 the extent I don't deal with all the issues, that
25 doesn't mean we don't care about them or don't

1 support the other interveners on them, it simply
2 means we are leaving those to them to argue and
3 trying to be as focused as we can in our argument
4 with respect to how we participated in the
5 proceeding.

6 So let's talk about Shell's Assessment
7 methodology first. The Terms of Reference of the
8 Joint Review Panel on page 12 talk about how you're
9 supposed to consider that. And in Part II on
10 page number 11, it says:

11
12 "The Joint Review Panel shall
13 conduct an assessment of the
14 environmental effects of the
15 project based on the Scope of
16 Project."

17
18 In 2, it says:

19
20 "The assessment shall include
21 a consideration of the..."

22
23 Following factors:

24
25 "a. the environmental effects of

1 the Project..."

2

3 And it goes on:

4

5 "... and any cumulative
6 environmental effects that are
7 likely to result from the project
8 in combination with other projects
9 or activities that have been or
10 will be carried out;"

11

12 And then 2.b:

13

14 "b. the significance of the
15 effects referred to in
16 paragraph a."

17

18 So this issue is clearly very relevant to
19 your mandate.

20

21 And on methodology we submit two concerns
22 that we have with the methodology that Shell has
23 used.

23

24 First, we say that the size of the RSA is
25 inappropriate and too large, and the LSA is
inappropriate given the size of the footprint.

1 And two, we submit that Shell failed to
2 appropriately consider the ecological context for
3 both terrestrial resources and Aboriginal and
4 Treaty impacts, rights, and use of land.

5 So dealing with the first one, the Regional
6 Study Area. We submit that this Regional Study
7 Area was initially set out for two projects, Pierre
8 River and Shell Jackpine Expansion, and it's too
9 large with respect to the one project. For
10 example, you might take judicial notice of the fact
11 that the Kearl Oil Sands Project had an RSA for
12 terrestrial resources of 1,195,956 hectares, and
13 that's at Volume 3, page 7-12 of that EA, whereas
14 this RSA is a million hectares greater for a
15 project that is actually smaller in bitumen
16 production.

17 I think that's a problem, in our submission,
18 with respect to the RSA.

19 In effect, an RSA is supposed to delineate
20 the furthest measurable effect of the project in
21 the area, in our submission, so you define the RSA
22 based on the furthest measurable effect. And this
23 defines the RSA on the furthest measurable effect
24 potentially of two mines, not the Jackpine alone.

25 And so we submit what the issue with that is

1 is simple: If the RSA is too big, it's easy to say
2 there are no impacts or all the negative impacts in
3 the RSA are negligible because it's such a large
4 area. It's a pretty simple exercise, the larger
5 the RSA gets, the lower the environmental
6 consequences become. And so it's vital that the
7 RSA be set out in an appropriate manner, and we
8 submit it has not been.

9 The Local Study Area.

10 Shell's LSA is slightly larger than the
11 disturbance footprint. I think there's a 500-metre
12 buffer around the disturbance. We submit that
13 Shell should have chosen a larger LSA. And that's
14 because basically the entire LSA is disturbed,
15 given their analysis. And then they argue that
16 because the entire LSA is disturbed and there are
17 significant environmental effects on terrestrial
18 resources within the LSA, you shouldn't pay any
19 attention to that, what's important is the RSA. I
20 submit that that's a type of sleight of hand, it's
21 a neat trick, but it should be rejected. Because
22 the Total panel, for example, and OSEC pointed this
23 out in cross-examination, that significance effects
24 are supposed to take place in the LSA, and
25 cumulative effects assessments within the RSA.

1 And what they've done is sort of turned that
2 around a little bit and said, well, the LSA should
3 be, you know, there are significant effects but
4 don't really pay attention to that because, I think
5 the analogy was, if you build a shed, of course the
6 imprint of the shed is going to be impacted. But
7 that isn't the way it should be. I think the LSA
8 should have been larger. If the LSA had been
9 larger, the problem they have in that circumstance
10 is that there still would have been significant
11 adverse environmental effects but they couldn't
12 have said "don't pay attention to them" because
13 they would have been significant because of the
14 other developments.

15 And so we submit that, and in particular, the
16 panel in Total indicated what I just said at
17 page 44 of their Decision with respect to
18 considering significant effects in the LSA and
19 cumulative effects in the RSA.

20 So we submit that that is a fundamental
21 problem with the way the determinations are made,
22 and should be rejected.

23 The second concern that we have with the
24 methodology is the failure to properly incorporate
25 ecological context. And here is our concern there.

1 We submit that in the context of the area in the
2 area of the disturbance, as is reflected in the
3 documents, and I'd like to refer to a few,
4 Figure 2.4-1 in Exhibit 001-051H, Exhibit 011-009,
5 and Exhibit 006-0130, which are the disturbance
6 analysis I've spoken about earlier done by MSES.
7 And Figure 7.2-2, which is Exhibit 001-001-E, and
8 Exhibit 001-014, which are the Alberta Government
9 project maps which I had entered during
10 cross-examination. I'm just going to refer to
11 those generally as "the disturbance exhibits," so
12 I'm not going to go through them again.

13 But I think if one looks at those documents
14 in a realistic way, it will show that the entire
15 LSA will be disturbed. And there was an admission
16 on cross-examination by Canada that 1.42 townships
17 of land are currently going to be disturbed.
18 That's at Volume 7, page 1219, undertaking 18 --
19 sorry, actually that was an undertaking response.

20 And given that impact that you will see if
21 you look at those exhibits, there's three or four
22 simple exhibits, just look at them in a clear way,
23 I think it's clear that the admission by Shell that
24 the area has been adversely affected by human
25 activities is correct. They've admitted that. And

1 that's obvious from the disturbance exhibits I've
2 just mentioned.

3 And that admission, which took place at
4 Volume 3, page 372, line 6, with respect to the
5 area being adversely affected by human activities,
6 is an important one, because Shell also accepted
7 the methodology contained in Exhibit 011-015 which
8 is a reference guide determining whether a project
9 is likely to cause significant environmental
10 effects. And they accepted that at Volume 3,
11 page 375, line 17.

12 Although we now have agreement by Shell that
13 this methodology is correct, and that the area is
14 affected by human activity, which is obvious from
15 the exhibits, they failed to factor that in
16 appropriately into their rating system for the
17 assessment of environmental consequences, in our
18 submission.

19 And they discussed that in cross-examination,
20 but it appears in the September 2012 Responses,
21 Exhibit 001-063, where they indicated, they said
22 this. They said:

23

24

"All of these criteria..."

25

1 And they listed:

2

3 "... direction, magnitude,
4 geographic extent, duration,
5 reversibility, frequency..."

6

7 Were included in the rating. But they said:

8

9 "All of these criteria were
10 included in the assessment
11 environmental consequences rating
12 system, except ecological context."

13

14 We submit that's a significant error in light
15 of the fact of the disturbance in this area,
16 particularly in the Existing Developed Case, the
17 Application Case and the Planned Development Case,
18 all of which show significant disturbance in that
19 area. That is one of the key concerns with
20 development in this area is the imprint of the
21 development, and the impact of human activities.
22 Without a doubt, that is one of the most important
23 criteria and we think it should have had a greater
24 role. They said they considered it through
25 professional judgment. But something like that, in

1 our submission, should have had more of a
2 quantitative impact on that criteria.

3 You cannot exercise professional judgment by
4 assuming away the problem within the analysis, in
5 our submission. So we submit that the failure to
6 consider ecological context in that respect casts a
7 shadow on the results of the effects analysis in
8 the RSA. And I'll be talking about that a bit
9 later.

10 With respect to impacts on terrestrial
11 resources and effects determinations, which is the
12 next step of this argument that we're making, we
13 submit that the Panel in its consideration should
14 consider effects determination prior to reclamation
15 taking place with respect to effects
16 determinations. And that's because there's very
17 little reclamation actually taking place now and we
18 don't know what the results of that reclamation is
19 going to look like in a real concrete way.

20 There isn't enough evidence to say that
21 reclamation will be successful or not. And my
22 friend this morning talked about risk. And the
23 question is one of what is a reasonable risk? Some
24 things are reasonable and others are not. And, in
25 our submission, to say that reclamation will be

1 successful, I think is a risky proposition.

2 In Exhibit 001-051-E in Table 4.4-1, I had a
3 discussion with Shell about that table and its
4 meaning. It's called "Wildlife Abundance," but if
5 I understood their answer correctly, it was really
6 more about wildlife mortality due to interaction
7 with infrastructure. If that's correct, then
8 that's fine. If the argument is that a 500-metre
9 buffer, on the other hand, around a surface mining
10 area is appropriate to maintain wildlife abundance,
11 then we submit that that notion should be rejected.

12 With respect to the impacts contained, the
13 effects impacts contained in Table 4.4-2 in
14 Exhibit 001-051-E, many of the effects on species
15 of concern to my clients, the large mammals in
16 particular, and animals that can be trapped, are
17 significant in the LSA. And we submit that that
18 means that there are going to be significant
19 adverse environmental effects from the Project.

20 With respect to the RSA determinations, they
21 are typically listed as negligible. We submit that
22 that's incorrect. And the reason why we say that's
23 wrong is for the reasons we cited earlier in our
24 criticism of the methodology.

25 The first being that the RSA is too large, so

1 it's easy to say that the effects are going to be
2 negligible to the terrestrial resources in such a
3 large RSA. We say that should be rejected.

4 And the second is the ecological context
5 issue. We don't think that was appropriately
6 considered in the methodology resulting in those
7 effects determinations within the RSA.

8 So we submit that the impacts in the RSA, if
9 one considers those emissions, are significant.
10 And if one looks at the disturbance exhibits, which
11 make up a fairly large, if you look at the
12 disturbance in those exhibits that I've referred to
13 earlier, there's a significant part, even of the
14 very large RSA, that's already disturbed, and in
15 the Planned Development Case, it's going to be more
16 disturbed.

17 There's been discussion about planned
18 development versus pre-industrial cases and those
19 are very useful concepts, particularly for my
20 clients who were here before there was industrial
21 development and have lived through industrial
22 development. But even if one doesn't look at those
23 and just looks at those disturbance exhibits, which
24 I ask you to look at again and again, I think you
25 can say that there's significant disturbance in the

1 area already, and here's more coming, and as a
2 result of that ecological context, we're going to
3 have significant environmental impacts in the RSA.

4 Last point on this argument, this line of
5 argument, the footprint of the Expansion of the
6 Jackpine Mine was set out in Figure 1-1 in
7 Exhibit 001-001-A, which is Volume 1, as being
8 15,900 metres cubed per day, that's the capacity.
9 The original Jackpine Mine was 31,900 metres cubed
10 per day. The area of the Jackpine Expansion it
11 looks like it's almost double the area of the
12 original Jackpine Mine. And I asked some questions
13 about this to Shell to explain why that was the
14 case, and I don't think they, at least from my
15 perspective, answered those questions in a way that
16 I could intelligently understand. And that was in
17 Volume 3, page 363 to 365. And I think what we've,
18 what I conclude from that is simply that with
19 respect to the Jackpine Expansion, we've got twice
20 the disturbance, twice the environmental impact for
21 half the bitumen product. That's what I gather
22 from that line of cross-examination and those maps.

23 With respect to impacts to Aboriginal and
24 Treaty Rights in current use of lands for
25 Aboriginal purposes, the Terms of Reference

1 contains a lot of language, as does the new
2 **Canadian Environmental Assessment Act (2010)** in
3 Section 5 about impacts to Aboriginal peoples. So
4 this is clearly a very important part of your
5 mandate.

6 In particular, on pages 5 and 6 of the Terms
7 of Reference under "Aboriginal Rights and
8 Interests", it says the Joint Review Panel may
9 receive information about Aboriginal groups and
10 rights. And then it goes on to say on page 12,
11 Part III that the assessment by the Joint Review
12 Panel shall also include a consideration of the
13 following additional matters. And it includes
14 effects of the project on asserted or established
15 Aboriginal and Treaty Rights and community
16 knowledge and Aboriginal traditional knowledge
17 received during the Joint Review.

18 And then it says (as read):

19

20 "The Joint Review Panel shall
21 consider:

22

23 ...

24

25

- Any potential effects on

1 uses of lands and resources
2 by Aboriginal groups for
3 traditional purposes;
4 - Any effects (including
5 the effects related to
6 increased access and
7 fragmentation of habitat) on
8 hunting, fishing, trapping,
9 cultural and other
10 traditional uses of land ...
11 as well as related effects on
12 lifestyle, culture, health
13 and quality of life of
14 Aboriginal persons."

15

16 It goes on:

17

18 "- Any effects of
19 alterations to access into
20 areas used by Aboriginal
21 persons for traditional uses;
22 - Any adverse effects of
23 the project on the ability of
24 future generations to pursue
25 traditional activities or

1 lifestyle;
2 - Any effects of the
3 project on heritage and
4 archaeological resources in
5 the project area that are of
6 importance or concern to
7 Aboriginal groups;

8
9 - The methods and measures
10 proposed to manage, mitigate and
11 compensate to an acceptable level,
12 any identified effects on asserted
13 or established Aboriginal rights
14 and interests."

15
16 Yet the Terms of Reference are full of this
17 type of language, and, in my submission, the
18 Application doesn't go to meet those Terms of
19 Reference. And we submit that impacts to Treaty
20 Rights and current uses of land for traditional
21 purposes by Aboriginal persons are significant and
22 adverse, as we've submitted earlier that the
23 impacts to terrestrial resources are significant
24 and adverse.

25 I think we still have to consider the

1 ecological context when we're talking about
2 assessing an impact to an Aboriginal Right or the
3 current use of lands by Aboriginal persons, because
4 it is, in effect, an environmental effect that
5 we're talking about. And the ecological context
6 wasn't discussed by Shell at the hearing. I didn't
7 see it contained in a significant way in the
8 Application.

9 The ecological context is one of heavy
10 disturbance. The First Nations peoples culture and
11 use of the land is fragile. It is, you know, an
12 area that's been impacted heavily by human
13 activity. And we are not talking about the
14 socio-economic benefits of the Project and the
15 jobs. And I'm not saying that that is bad, no, I'm
16 not. And I agree with Shell, with people that say
17 that that's a benefit. I can't deny it. And it's
18 a big one, I think, in the area. But the question
19 is, that isn't what we're talking about when we're
20 talking about impacts to culture, though. We're
21 talking about use of the land. We're talking about
22 the ceremonies and those types of things. Those
23 are the types of things that have been eroded and
24 that are of concern in an EA, and that the Terms of
25 Reference talk about.

1 Certainly Shell might argue we're spending
2 nine to twelve billion dollars here, this is of
3 economic benefit. We think there's got to be a
4 limit at some point in time, but that isn't for the
5 Panel to consider, in our submission, perhaps it's
6 part of the ERCB's public interest jurisdiction.
7 But under CEAA, in any event, that decision is to
8 be made by the Minister or the Governor in Council,
9 taking into account those effects and those
10 economic matters. And when we're looking at
11 culture, I don't think we can say that it's
12 compensated by these jobs, that's not the point of
13 the analysis. If that's in fact going to be the
14 decision of the Governor in Council, fine, let him
15 make that decision, but that's not part of the EA.

16 There is no study with respect to culture.
17 The areas over which the rights are exercised in
18 Fort McMurray's traditional territory are severely
19 restricted, not just because of a loss of animals
20 and plants but because of a lack of access to these
21 areas due to mining. Although public access is
22 provided, we understand, in areas where no active
23 mine exists, as clarified by Shell, there are many
24 active mines in the Project area, and with respect
25 to the Planned Development Case, limiting access.

1 And the affidavits of Alden Cree and Philip
2 Cheecham set out some information about concerns
3 about access.

4 And although Shell said that there was
5 readily available access, that hasn't been clearly
6 set out in the Application. I don't see anywhere
7 where it's clear how someone might access these
8 areas, what areas are going to be available, what
9 areas are not going to be available, that could
10 have been set out, that wasn't set out. There
11 isn't enough information about that, and the
12 conclusion is simply, in my submission, that access
13 will be further restricted. Despite efforts
14 potentially to allow some access, it's a surface
15 mine, so there's going to be impacts to access, and
16 not just the impacts to the species but to access
17 as well, which is an impact to the exercise of the
18 right.

19 So we submit that it follows that significant
20 adverse impacts from the Project will exist on
21 Aboriginal Treaty Rights and current use of land in
22 both the LSA and the RSA. We say that with respect
23 to the LSA because it's being completely disturbed
24 just about, so there has to be significant adverse
25 impacts. If there are to terrestrial resources

1 that are harvested then there are to the First
2 Nation Rights in that circumstance. They are in
3 the RSA. If one simply looks at the disturbance
4 exhibits that I've referenced earlier, and looks at
5 the disturbance in that area, which we submit of
6 course is too large for the purposes of the EA, the
7 impacts are great. And we submit that we might as
8 well call a spade a spade here and say that the
9 impacts are significant so we can then at least
10 deal with them, if we need to. But I think that
11 point is an important one that should be accepted.

12 We are talking about significant adverse
13 effects here. And maybe there's a way to deal with
14 them. But we might as well not say they're not
15 significant, as Shell is urging you to do.

16 I'd like to speak a little bit about some
17 previous decisions of CEAA panels and their
18 consideration of Aboriginal concerns in their
19 decisions. In particular, and I can provide these
20 if they are not available, I've spoken to
21 Mr. Perkins about that. In the Kemess North Copper
22 Gold Mine Project Joint Review Panel Report, which
23 is September 17th, 2007, that project, which was a
24 copper mine, was denied and one of the main
25 contributing reasons was risks to culture.

1 The analysis is stated at page 245 of that
2 report, Risks to Aboriginal Culture. The JRP noted
3 that there would be a long-term negative
4 environmental legacy for the Aboriginal peoples
5 living in the area, and given, in our submission,
6 the pace of development in the Athabasca Oil Sands
7 Region, that case is relevant. It's relevant
8 because that is the legacy that will be left once
9 the mining is done, is what's left for the
10 Aboriginal people. It's a consideration that that
11 panel used in denying that project. We submit it
12 applies equally here today.

13 The Panel in Kemess Ness (sic), also at
14 page 246, had a concern about the proponent failing
15 to engage Aboriginal people in the region. And I
16 don't know why, but for this Project, in my
17 submission, as I mentioned earlier, I think it's a
18 low watermark for Aboriginal participation. We
19 have a lot of opposition. There have been
20 agreements I think with Mikisew and Fort McKay, but
21 ACFN is opposing, Fort McMurray is opposing, the
22 Métis are opposing. That's not a lot of
23 stakeholders. That's only a handful of
24 stakeholders and half are opposing.

25 I submit that's significant Aboriginal

1 opposition. It's not that much different than
2 Kemess Ness (sic), in my submission. It's a
3 different project, and my friend may argue that,
4 and that's fair, but the principles are the same,
5 in my submission.

6 The panel in that case specifically stated at
7 246 (as read):

8
9 "The Panel simply observes
10 that having such agreements in
11 place at the outset of a Panel
12 review is strongly recommended, and
13 that failure to conclude such
14 agreements in advance puts a Panel
15 in a difficult position in any
16 situation where the Project under
17 review could substantially affect
18 Aboriginal interests."

19
20 And we're not speaking about a project with
21 marginal economic viability that may have
22 difficulty to engage Aboriginal groups, which was
23 the case I think in Kemess Ness (sic), we're
24 talking about a large multi-national blue chip
25 company.

1 Similarly, in the Whites Point Quarry and
2 Marine Terminal Joint Review Panel Report of
3 October 7th, 2007, which took place in Nova Scotia,
4 one of the main factors for rejecting the project
5 was respect for traditional and community
6 environmental knowledge. In particular, the Joint
7 Review Panel noted at page 101:

8
9 "The Panel believes that the
10 assessment would have benefited
11 from more effective integration of
12 traditional community knowledge
13 into the EIS. The public
14 consultation employed by the
15 Proponent was not effective in
16 creating a transparent process
17 where community members felt that
18 they could openly and freely
19 express their opinions and concerns
20 about the Project. Consequently,
21 for example, information on..."

22
23 Sorry, I'll skip that.

24
25 "The Proponent failed to

1 incorporate vital information into
2 its consideration of alternatives
3 or into its project design."

4

5 And at page 103:

6

7 "A primary consideration
8 influencing the Panel's decision to
9 recommend rejection of this Project
10 is the adverse impact on a Valued
11 Environmental Component: the
12 people, communities, and economy of
13 Digby Neck and Islands. This
14 region of Nova Scotia is unique in
15 its history and in its community
16 development activities and
17 trajectory. Its core values,
18 defined by the people and their
19 governments, support the principles
20 of sustainable development based on
21 the quality of the local
22 environment. Local residents are
23 deeply embedded within and
24 dependent on the terrestrial and
25 marine ecosystems of this region:

1 human health and well-being is
2 intrinsically linked with the
3 viability of the ecosystem."

4

5 And that can be equally said for the
6 Aboriginal peoples, including my client, in this
7 area of Alberta.

8 And, finally, the last authority is, or
9 decision is the Prosperity Gold Copper Mine Review
10 Panel of 2010 where the panel, in denying that
11 project for a number of reasons, but including
12 First Nations issues, said at page 2 of the
13 Executive Summary:

14

15 "The Panel concludes that the
16 Project would result in significant
17 adverse environmental effects on
18 fish and fish habitat, on
19 navigation, on the current use of
20 the lands and resources for
21 traditional purposes by First
22 Nations and on cultural heritage,
23 and on certain potential or
24 established Aboriginal rights or
25 title."

1

2

It goes on at page 3 to talk about a reduction in use areas being a significant impact. And on page 4 of the Executive Summary as well, which I won't read into the record, you can refer to those.

6

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But what I'm saying is this isn't just noise any more. In the previous panel decisions, I submit, that they weren't given, these types of interests weren't given the proper consideration that they should have. But that's changing. We're growing as a society. We're seeing that these are actually valued, and the Terms of Reference of the Panel set that out clearly, in my submission.

15

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21

These are reasons to deny projects if these are impacted, these types of rights are impacted significantly or not studied properly. And in my submission, you have both here, particularly with respect to my clients, Fort McMurray First Nation. And I think the Métis made some comments about that as well.

22

23

24

And I would like to talk a little bit now about, this is my last area, about that consultation dialogue between my client and Shell.

25

In our submission, Shell has admitted on the

1 record in numerous places that Fort McMurray has an
2 interest in the Project area. The evidence on the
3 record indicates that Fort McMurray has use in the
4 RSA and very close if not within the LSA itself.
5 These are subject to significant developments in
6 the Application Case. The LSA is drawn around the
7 mine footprint. We submitted earlier that that
8 should have been a larger footprint. And had it
9 been, it would have included my clients probably
10 within some of their traditional use points, but it
11 wasn't, it was smaller. But they are contained
12 within the RSA but for some reason that isn't
13 relevant now. It was Shell's RSA that they chose.
14 And my clients have use in that RSA and very close
15 to the Project area, if not in the Project area,
16 yet they weren't provided the ability to study
17 impacts to their rights, which are of great concern
18 to them.

19 The exhibits of Fort McMurray, the maps that
20 I've referred to earlier, which we submit you can
21 pay attention to, in Exhibit 011-009 and 011-002,
22 show that the Project is located in the northern
23 part of what's -- that isn't the territory of the
24 Nation, that is those areas identified as the
25 northern end of that area is simply based on the

1 2006 study and the limits defined therein. But
2 that study was with respect to a southern project,
3 so they didn't go further, in my submission.

4 McClelland Lake, for example, is an important
5 site to the First Nation, which is very close to
6 the LSA, and that's contained in that information
7 that I've referred to in the Fort McMurray
8 exhibits.

9 Effectively the data points in those exhibits
10 are based on mapping layers that were currently
11 available for the 2006 study, and all we did was
12 include some of those in those maps, whereas they
13 weren't included in the 2006 study because the maps
14 just didn't go far north enough. So we just used
15 that same data in the 2006 study and plotted it
16 later on. But that doesn't mean that that's the
17 extent of the traditional use of Fort McMurray.
18 No. We provided that information to say, because
19 Shell was saying to us, you don't have use there
20 and we need you to show us how you do. We said,
21 okay, we can, we don't have a lot of resources, so
22 here you go, here's the 2006 data that you
23 commissioned and it shows all these data points in
24 the north around the area, so can we get some
25 capacity assistance to study this properly so that

1 you for your EA for your Project can determine the
2 impacts, which is your obligation, which is Shell's
3 obligation, in your EA, in Shell's EA. But that
4 was refused.

5 And if you look at the maps attached to
6 Exhibits, which are the affidavits, 011-004 and
7 011-003, Philip Cheecham and Alden Cree, you will
8 see where they have noted their use is beyond the
9 data points further north along the Athabasca in
10 around McClelland Lake. So even just those two
11 affidavits show further data which Shell should
12 have said, okay, there's different data here, maybe
13 we need to study this. But just those two
14 affidavits show the use in greater areas.

15 It is ironic, Mr. Chairman, that although
16 Shell came to this area with its first Muskeg River
17 project, if I have that correct, in the mid-1990s,
18 it's ironic that it has assumed the role of
19 deciding the validity of Fort McMurray's claims to
20 impacts in the area despite Fort McMurray being
21 there for thousands of years. I submit that's very
22 ironic. But that's what we have.

23 Another reason why it isn't appropriate
24 necessarily to rely on older data with respect to
25 traditional use is because traditional use isn't a

1 constant thing in one particular area. It moves
2 around. And because of certain rights under the
3 NRTA, and I guess this is all the Treaty 8 area,
4 people can hunt and trap in different areas, and
5 often is the case that particularly in an area like
6 this, which has significant human disturbance, you
7 will see people using areas that they perhaps
8 hadn't used before because they are available and
9 the ones that they had used previously are no
10 longer available. But the point is that that
11 traditional use is an evolving concept, which is
12 why you can't just do a study and rely on it for
13 10 years, why you have to continue to update it
14 because sometimes, as Shell has argued, we will
15 have areas that are currently being mined that are
16 going to be reclaimed. Well, if they are
17 successfully reclaimed, and animals go there, then
18 traditional users may go there, and that may shift
19 their pattern, which is why it's important to study
20 the impacts on an ongoing basis and for
21 consultation to be ongoing, and assessment to be
22 ongoing. But that wasn't done here.

23 What the Application has done is assumed the
24 impacts to Fort McMurray are the same as for other
25 First Nations that were studied, but that isn't the

1 case. And that assumption isn't proper in the
2 context of an EA, in my submission.

3 And this doesn't result from a lack of
4 cooperation by Fort McMurray First Nation with
5 respect to EA. They were happy to meet with Shell
6 to do an EA, but the point was, and Shell in
7 fairness confirmed this on the record, that they
8 weren't prepared to provide capacity assistance
9 because they didn't view there to be any impacts.
10 I'm not sure how they came to that conclusion. I'm
11 not sure why they wouldn't have just said, well,
12 this group is claiming rights, they've been here a
13 long time, we should study them, we have a large
14 project, this isn't going to be a significant cost,
15 and it's needed for the EA. That to me would have
16 been the best decision. I can't for the life of me
17 understand why that decision wasn't taken. But it
18 was not. And so the Panel doesn't have that
19 information.

20 And I think that's a problem with the record
21 that Shell has.

22 The record is clear that Fort McMurray has on
23 numerous occasions attempted to provide information
24 to Shell to have this matter studied. And I've
25 referred to some of the exhibits, Exhibit 011-005,

1 which is a letter by us, which contained the
2 affidavits and the maps, which are Exhibits
3 011-003, 011-004 and 011-002, and our letter
4 setting out the concerns of the Nation in those
5 exhibits.

6 In addition to failing to engage with respect
7 to capacity for the study of effects, there has
8 been no socio-economic benefits provided to Fort
9 McMurray as there have been to perhaps other
10 stakeholders. They had one time contributed to the
11 Consultation Initiative, the IRC, but stopped that
12 in I believe 2010. I'm not sure why, but they did.

13 So to conclude that line of argument, we
14 submit that it isn't for Fort McMurray to establish
15 rights for the purposes of the EA. The Band, which
16 is not a wealthy Band, has done what it can in this
17 process to try to assert its rights for the Panel's
18 consideration. But in effect, it's Shell's onus as
19 part of its EA and the Panel's onus as part of its
20 Terms of Reference to consider impacts to those
21 rights and, in my submission, Shell has failed to
22 do that and provide that information to the Panel.

23 So our client's position is that the
24 Application should be denied at this time due to
25 the concerns that we've outlined.

1 If the Panel disagrees with that and agrees
2 to approve the Project, we submit that in order to
3 prevent significant adverse environmental effects
4 from occurring to terrestrial resources and the use
5 of land by Aboriginal peoples for traditional
6 purposes and Treaty Rights, the Joint Review Panel
7 should recommend a condition that the Project be
8 delayed for a period of 10 years.

9 And I submit that's a reasonable condition
10 given the pace of development in the oil sands.
11 And I'll tell you why. There was a question asked
12 by the Panel in SIR-7 about an alternative and
13 delay and I had some discussion with Shell about
14 this in cross-examination. And I submit that the
15 following points support such a condition, and we
16 submit it's necessary to avoid significant adverse
17 environmental effects and so is within the Terms of
18 Reference of the Panel:

19 Shell did not perform an analysis of the
20 economic impacts of delaying the Project for a
21 period of time, such as 10 years, as confirmed in
22 cross-examination. We submit that positive
23 environmental benefits would result from delaying
24 the Project. That discussion took place at
25 transcript Volume 3, page 335.

1 Shell admitted that oil prices will likely
2 continue to remain strong over the longer-term, as
3 confirmed by Shell at transcript Volume 3,
4 page 336.

5 We submit that pipeline capacity in the
6 medium term remains questionable at the present
7 time.

8 We submit the Jackpine Mine will continue for
9 its useful life until 2030, which will coincide
10 with the Muskeg River Mine, and the resources
11 between those mines can continue to be shared over
12 the lives of those mines, as confirmed by Shell at
13 transcript Volume 3, page 331.

14 The resource contained in Lease 13 will
15 eventually be utilized by Shell, just at a later
16 date. The lease costs associated with that lease
17 were confirmed in an undertaking, and aren't that
18 significant: \$185,000 in 2012. \$1.170 million in
19 2020. And \$3,750,000 in 2025.

20 We submit that we would ask for a condition
21 to delay the Project if it's approved.

22 We would also ask that a condition be put on
23 any approval that Shell consult with Fort McMurray
24 First Nation and complete a traditional use study
25 with respect to impacts from the Project on Fort

1 McMurray's rights and file the same within six
2 months prior to construction commencing.

3 Mr. Chairman, those are my submissions,
4 subject to any questions you and the other Panel
5 Members may have.

6 THE CHAIRMAN: No questions, sir. Thank
7 you.

8 MR. JEERAKATHIL: Thank you.

9 THE CHAIRMAN: We'll take 10 minutes before
10 we turn to ACFN's argument.

11 Mr. Murphy, are you and Ms. Biem prepared to
12 deliver all of ACFN's argument today?

13 MR. MURPHY: We can do our best. I should
14 say with one caveat, we had hoped to provide to our
15 transcriber a written copy of our argument, and
16 frankly to all the parties. We've had some
17 formatting issues so that's not quite done. I can
18 certainly do my portion of the argument and we'll
19 see where we get. And then perhaps Ms. Biem can
20 carry on or perhaps she can carry on in the
21 morning.

22 THE CHAIRMAN: In terms of the material that
23 you're having trouble formatting, is that something
24 that could be provided a little later?

25 MR. MURPHY: Yes, I think it could.

1 Certainly by this evening, we could provide that to
2 Madam Court Reporter.

3 THE CHAIRMAN: Thanks. I have 4:37. We'll
4 take 10 minutes.

5

6

(Brief break)

7

8 THE CHAIRMAN: Mr. Murphy, thanks for your
9 patience. I understand what we're going to try to
10 do is have you deliver your portion of ACFN's
11 argument, and then we'll turn to Ms. Gorrie and
12 she'll do a portion of hers. I hope that's all
13 satisfactory. I think it will help us out.

14 MR. MURPHY: Perhaps. I think we're going
15 to see where I get to, and I'm certainly going to
16 finish my end of the submissions, and then it may
17 be that Ms. Biem does carry on from there.

18 THE CHAIRMAN: Are you going to go for about
19 an hour. We should have a short break. Go ahead.

20

21 **FINAL ARGUMENT OF THE ATHABASCAN CHIPEWYAN FIRST NATION,**

22 **BY MR. MURPHY:**

23 MR. MURPHY: ACFN's position in this
24 hearing is that they oppose the approval of the
25 Project.

1 They say that there's direct and adverse
2 impacts on their Aboriginal and Treaty Rights and
3 traditional land use.

4 They say that consultation has been
5 inadequate.

6 They say that the mitigations proposed
7 haven't responded to the impacts that they've
8 raised and their concerns about the Project.

9 And they also say that the EIA has
10 significant gaps.

11 And so we'll be speaking to each of those
12 areas.

13 On October 30th, Shell presented its
14 directive evidence and Mr. Kovach said there will
15 be no likely significant adverse effects to
16 ecological resources. And Ms. Jefferson said there
17 will be no significant adverse effects to
18 traditional activities within the RSA or within
19 larger traditional use areas. And my learned
20 friend for Shell has reiterated those positions
21 through his submissions.

22 In my submission, we will show why those
23 statements are irreconcilable with the facts before
24 you. And as my friend said earlier, your decisions
25 here must be based on fact and analysis, and so I'm

1 going to take you to that.

2 I was going to walk through some of the Terms
3 of Reference. I'm not going to do that. My friend
4 Mr. Jeerakathil already has taken you to those
5 provisions. It takes me to about paragraph 9 of
6 the argument that I said we'd be circulating. I do
7 want to, however, highlight a couple of portions of
8 the Terms of Reference and it's only by way of
9 introduction to some of the evidence that ACFN has
10 provided.

11 ACFN has taken the Terms of Reference quite
12 seriously in developing the evidence that they've
13 prepared for this hearing. And the reason I say
14 that is, you know, you'll find in the Terms of
15 Reference, under Part 3, things like this Panel
16 considering any effects on, and it goes through
17 hunting, fishing, trapping, but it also talks about
18 related effects on lifestyle, culture, health,
19 quality of life. It talks about any adverse
20 effects of the Project on the ability of future
21 generations to pursue traditional activities or
22 lifestyle. And it also talks about any effects of
23 the Project on heritage.

24 And I point those out specifically because of
25 course we submitted a number of studies to this

1 Panel by, you know, authors such as Dr. McCormack,
2 Pat Larcombe, Alistair MacDonald. And I just want
3 to make the point that they are not just for
4 interest's sake, they are actually prepared to
5 inform those specific areas that the Terms of
6 Reference say will be considered by this Panel.

7 So they are fairly core reports. They speak
8 to a lot of evidence about those matters that I
9 just referred to in the Terms of Reference.

10 And I should add that those reports weren't
11 challenged in any way by any party. They stand as
12 uncontroverted evidence. I just wanted to make
13 that point at the outset.

14 Now, you heard from Elder Rene Bruno who
15 said:

16
17 "Anything on your land,
18 you'll never be restricted from
19 carrying on with your traditional
20 vocations. And that's what we were
21 told."

22
23 And he was referring to what ACFN was told by
24 the Commissioners.

25 The Supreme Court of Canada, by way of

1 context, has looked at Treaty 8. And this is in
2 the **R. v. Badger** case, 1996 case of the Supreme
3 Court of Canada. And in looking at the importance
4 to the Indians of the right to hunt, fish and trap,
5 the Commissioners wrote:

6
7 "We pointed out ... that the
8 same means of earning a livelihood
9 would continue after the treaty as
10 existed before it, and that the
11 Indians would be expected to make
12 use of them ... Our chief
13 difficulty was the apprehension
14 that the hunting and fishing
15 privileges were to be curtailed."

16
17 "... we had to solemnly assure them
18 that only such laws as to hunting
19 and fishing as were in the interest
20 of the Indians and were found
21 necessary in order to protect the
22 fish and fur-bearing animals would
23 be made, and that they would be as
24 free to hunt and fish after the
25 treaty as they would be if they

1 never entered into it."

2

3 And, finally, by way of context, the Indian
4 Claims Commission also looked at Treaty 8 and what
5 it promised. And they said, and this is at page 77
6 of that report, which is in evidence:

7

8 " In our view, no reasonable
9 interpretation of Treaty 8 could
10 allow either the Government of
11 Canada or a provincial government
12 to destroy the ability of a First
13 Nation to exercise its treaty
14 harvesting rights or to alter
15 fundamentally the environment upon
16 which those activities were based."

17

18 So the Treaty itself, you heard Rene Bruno
19 talking about his grandfather signing the Treaty,
20 ACFN are clearly the successor to the Aboriginal
21 group that signed on to the Treaty.

22

23 ACFN and its members continue to hold and
24 exercise those rights guaranteed by the Treaty.
25 They include the rights to hunt, to trap, to fish,
 to gather. Those rights have been affirmed by

1 several Supreme Court of Canada cases.

2 And just as the right to hunt must be
3 understood as the Treaty-makers would have
4 understood it, so, too, must the terms "taking up"
5 and "mining" as those appeared in the Treaty. And
6 again, the **Badger** case looked at those terms and
7 the Supreme Court of Canada said:

8
9 "Although it was expected
10 that some white prospectors might
11 stake claims in the north, this was
12 not expected to have an impact on
13 the Indians' hunting rights."

14
15 The B.C. Court of Appeal in the **West Moberly**
16 decision, it's a recent case, it's actually from
17 last year, it's in the B.C. area of Treaty 8, and
18 it looked at claims being made and how those relate
19 to the Treaty. And the Court at paragraph 135
20 said:

21
22 " I interject to point out
23 that 'some white prospectors [who]
24 might stake claims', to the
25 understanding of those making the

1 Treaty, would have been prospectors
2 using pack animals and working with
3 hand tools. That understanding of
4 mining bears no resemblance
5 whatever to the Exploration and
6 Bulk Sampling Projects at issue
7 here, involving as they do road
8 building, excavations, tunnelling,
9 and the use of large vehicles,
10 equipment and structures."

11
12 And it's just to put this in context, Panel,
13 we say that those findings are applicable here in
14 that the Commissioners never anticipated that the
15 Indians could be displaced from significant areas
16 of northern lands by the expansion of competing
17 land-use activities. And there's certainly some
18 expectation they'd be displaced from smaller areas,
19 but certainly not large areas and particularly as
20 we've been seeing in the last 10 years or so with
21 the expansion of the oil sands.

22 Now, with those Treaty Rights, ACFN says that
23 they also have incidental rights. These are
24 claimed incidental rights essential to the exercise
25 of those Treaty Rights I mentioned a moment ago.

1 Those are routes of access and transportation,
2 which I'll be getting into a bit more, sufficient
3 water quality and quantity, sufficient quality and
4 quantity of resources in preferred harvesting
5 areas, cultural and spiritual relationships with
6 the land, abundant berry crops and preferred
7 harvesting areas, traditional medicines in
8 preferred harvesting areas, the experience of
9 remoteness and solitude on the land. You heard
10 some of the ACFN witnesses talking about things
11 like that, like Beatrice Deranger, the right to
12 instruct the younger generations on the land, lands
13 and resources that are accessible within
14 constraints of cost and time, and of course
15 spiritual sites.

16 Now, you've heard from ACFN that Treaty 8 was
17 an agreement to share the land. And they have
18 always understood that they'd be able to manage
19 their lands and pursue their traditional vocations
20 without an interference.

21 And as Elder Rene Bruno put it, ACFN members
22 would never be restricted from carrying on their
23 traditional vocations. And so the Treaty, from
24 ACFN's perspective, the Treaty protects the core
25 entitlement to their meaningful exercise of their

1 Treaty Rights on their traditional lands.

2 And I just want to take a moment to just talk
3 about the notion of territory, the notion of
4 traditional lands. You've heard some argument on
5 this.

6 Now, you've heard that the traditional lands
7 radiate north, east, west and south from the
8 Peace-Athabasca Delta. They include the Lower
9 Athabasca River. They extend to lands around Fort
10 McMurray and Fort McKay. Now, ACFN Traditional
11 Lands are not, unfortunately, defined in the manner
12 that sort of fits neatly within European patterns
13 of land use and land holding.

14 Pat McCormack does a really great analysis
15 and I'm going to point out some of the highlights
16 of the analysis she does of the view of traditional
17 lands and how they don't conform to the traditional
18 boundaries. But that's in her ethnohistory and
19 it's pages 108 to 139. Of course I won't be going
20 through all of that.

21 Now, ACFN has been asked to identify
22 boundaries where their legitimate interests in the
23 land stop and start. And so it's important to note
24 that these are constructions that are not part of
25 traditional Dene land management practices. Now,

1 ACFN has used tools such as maps and planning units
2 or zones in an attempt to explain use and
3 occupation of traditional lands. And this is just
4 to help, you know, those that are making decisions,
5 those that, in the government, that are making
6 decisions about those lands. But they've been
7 clear, and, for example, one of the documents that
8 they've written called "Footprints on the Land,"
9 they clearly said in that document, look, in the
10 context of the large nomadic territory, likely
11 occupied by the Chipewyan people in the context of
12 the continually evolving culture and adaptations of
13 these Aboriginal people, it is inappropriate to
14 speak of boundaries. And so what ACFN has tried to
15 do in some of these planning processes is it's
16 presented its lands in the form of, like, planning
17 units, for example. And it's done that in
18 submissions on the Lower Athabasca Regional Plan,
19 you've also seen that in the Caribou Strategy, the
20 Nih boghodi document that's been entered in
21 evidence.

22 But ACFN's been clear that those planning
23 units and zones are just that, they are units and
24 zones based on traditional use and other factors.
25 They are subsets of traditional lands.

1 And Lisa King, the Director of the IRC,
2 talked about, you know, how her office works with
3 ACFN members and is constantly trying to update
4 their knowledge and their database about their
5 territory.

6 And so just to be clear, ACFN's use of maps
7 for communication purposes with government
8 represents, you know, good-faith attempts on their
9 part to reconcile their view of territory with that
10 which is sort of expected of them. And it's not
11 meant to provide this, you know, I think has been
12 argued this notion that there's this massive area
13 which is at all times open and used by them.
14 Rather, I mean, that reduces their relationship to
15 lines on a map. It's overly simplistic. It
16 ignores the cultural reality that different parts
17 of traditional lands are relied upon for different
18 resources at different times and by different ACFN
19 families.

20 And what's relevant for this Panel's
21 decisions, inclusions, recommendations, is the fact
22 that the Project proposed here falls well within
23 all of the mapped and narrative expressions of ACFN
24 's traditional lands. And each of the mine
25 Expansion itself and the proposed compensation lake

1 are located adjacent to and on key travel routes
2 and areas that are central to Chipewyan use and
3 occupation.

4 And if the Panel does require a static area
5 in order to understand ACFN traditional lands, our
6 submission is that the appropriate context area is
7 that which is set out as the Regional Study Area in
8 Dr. Candler's evidence, and that's found at Exhibit
9 006-013-I. It's page 38.

10 I'm going to talk now about ACFN's
11 distinctive identity and culture and what the
12 evidence has shown in this hearing.

13 ACFN members have maintained their
14 distinctive identity and culture as an Aboriginal
15 people by maintaining their cultural, their social,
16 their spiritual connections to their lands. This
17 has been done throughout generations. And despite
18 the challenges that they've faced, ACFN members are
19 deliberate in their pursuit of maintaining their
20 distinctive culture and identity. And living off
21 the land remains very important to ACFN culture.
22 You heard Chief Adam say so. You've heard Marvin
23 L'Hommecourt say so. And Pat McCormack, again,
24 there she is, in her ethnohistory, goes through
25 that distinctive culture and identity and how it's

1 tied to the land.

2 You've also heard that ACFN members reside
3 primarily in Fort Chipewyan, Fort McKay and Fort
4 McMurray. Those are the three centres in which
5 they primarily reside.

6 You've heard from a number of ACFN members
7 who talked about the active exercise of their
8 Aboriginal and Treaty Rights within Shell's Project
9 area, the Regional Study Area that Shell's put
10 forward, the one that ACFN has put forward, as well
11 as the Local Study Areas for the Project.

12 You've heard that the traditional harvesting
13 conducted in these areas includes, and it's not
14 limited to, moose, deer, beaver, muskrat, marten,
15 fisher, mink, wolf, grouse, rabbit, geese, ducks,
16 there's fish, there's jackfish, goldeye, suckers,
17 berries including blueberries and huckleberries,
18 and medicinal plants.

19 I want to pause here for a moment and address
20 a fundamental flaw in the reasoning that was raised
21 by my learned friend earlier this morning. It's
22 about the notion that ACFN is not affected, there
23 may be some individuals affected but not ACFN.

24 There's extensive law on this, but what you
25 need to keep in mind is that the collective holds

1 those rights, the individual's exercise them. And
2 so you can't understand how those rights are
3 exercised unless you go to the individual users.
4 And so it's the collective holds the rights, the
5 individuals exercise them.

6 And so that's what the law says and that's
7 what's going on here. You've got ACFN rights,
8 which I've talked about them, the Treaty Rights and
9 the incidental rights, you have individual members
10 exercising those rights. And, you know, of course
11 if ACFN was not, members weren't exercising those
12 rights, of course the argument would be, well, you
13 have no use of the area, so they are between a rock
14 and a hard place. As soon as they step up and say,
15 well, in fact, we do have individuals out there,
16 they face the argument that you heard this morning,
17 which is, well, that's not affecting ACFN as a
18 whole.

19 You will never, you will never see every
20 single member of any First Nation or Aboriginal
21 group in this country going out on the same area of
22 land either together or one after the other. You
23 just won't see that. It just doesn't happen. And
24 that's not the way rights are exercised.

25 As you've heard in the hearing, the Athabasca

1 River, it's the lifeblood of ACFN traditional
2 lands. The river provides a vital transportation
3 corridor, it provides access to reserve lands, it
4 provides access to traditional hunting areas,
5 trapping, fishing, gathering areas. It also
6 supports traditional resources required for the
7 meaningful exercise of ACFN rights and the
8 continuity of their distinctive culture. You heard
9 a number of ACFN members speak to this and how core
10 the river is to getting around, to getting to their
11 sites.

12 There's also some, in my submission, very
13 helpful studies of ACFN use of the Athabasca River
14 and the tributaries and that's Dr. Candler's report
15 "As Long as the Rivers Flow." And he also did
16 another report for this hearing called the
17 "Integrated Knowledge and End Use Report." And
18 those have been filed in evidence.

19 Of course ACFN members have observed a rapid
20 expansion in oil sands development in the last 10
21 years. And as Lisa King put it in her testimony,
22 they are frustrated. They don't see that there's
23 actually any real protection for the Athabasca
24 River or for the Peace/Athabasca Delta, frankly.
25 And they are frustrated because, you know, they've

1 been watching prior recommendations of prior panels
2 in these hearings, you know, recommendations to
3 establish inflow needs of the Athabasca River,
4 protection of the Muskeg River basin, and they just
5 don't see that happening. And all they see is the
6 water levels continue to get lower and they have a
7 more and more difficult time accessing and using
8 their lands and exercising their rights.

9 The Muskeg River itself, and Kearl Lake, and
10 Kearl Lake you've heard is also known as "Muskeg
11 Lake" to ACFN, the surrounding lands, the lands and
12 waters between Kearl Lake and McClelland Lake,
13 those are also important hunting, trapping,
14 gathering and fishing areas.

15 And the Muskeg River particularly holds
16 spiritual significance to ACFN. It's not just
17 about, you know, have we pulled any fish from the
18 river lately. You know, as Marvin L'Hommecourt
19 said, being there is medicinal. He talked to you
20 about, you know, waking up, hearing the river.
21 It's part of the connection to the land that I
22 think gets missed. And I want to emphasize that.

23 The area to the south of McClelland Lake, the
24 muskeg area that Mr. Laviolette spoke of, supports
25 woodland caribou. Their observations are that it

1 supports woodland caribou. And of course that's a
2 listed species at risk under the **Species at Risk**
3 **Act**. What you've heard about is the muskeg
4 providing safe areas for the caribou to raise their
5 young.

6 And woodland caribou are a culturally
7 important species for the ACFN. And their survival
8 is of great concern to the ACFN. And you heard
9 Chief Adam talking about the translation of their
10 name meaning "caribou eater." But what he said now
11 is, caribou are calling out for us and they are
12 asking for our help. And you see that in
13 Nih boghodi their Caribou Stewardship Plan. They
14 really take that seriously, they really feel that
15 they have a role in protecting the caribou, it's
16 important to them, spiritually and culturally.

17 The bison. You've heard about the bison.
18 Bison are also important as a food source, they are
19 important culturally. You've heard about bison
20 being hunted by the Dene as long as the Dene people
21 have been around. It's been thousands of years,
22 Elder Pat Marcel said.

23 The Project of course also is in the direct
24 path of migratory birds and migratory bird habitat
25 upon which ACFN rely. The spring bird hunt, it's a

1 core component of ACFN's past and present seasonal
2 round.

3 The Project and surrounding area of course
4 are also a source of fish and fish habitat for ACFN
5 members. And Lisa King also talked about how the
6 area will of course, some of the streams and
7 tributaries that go off of the Athabasca River and
8 that go through this area are also fish habitat
9 that members rely upon in terms of the fish that
10 enter the Athabasca River. So in looking at fish
11 and fish habitat, you need to look beyond just the
12 Project footprint, it's not just about whether
13 members fish in that segment of a river that's
14 covered by the Project.

15 And of course you've heard about the
16 medicinal use, the spiritual connection to the
17 lands that the members talked about. Those are all
18 very important factors that they, ACFN have made
19 connections to in terms of this Project area.

20 So let me talk a bit about the direct and
21 adverse effects that ACFN says that they have. And
22 they say they stand to be directly and adversely
23 affected by the Project in several ways.

24 And the first area I would like to cover is
25 with respect to land and resources.

1 The Project of course would remove two
2 further tracts of land, that being the mine, and
3 then the compensation lake. And you've heard the
4 members talk about the diminishing intact land base
5 that they have available to exercise their rights.
6 And in practice, the members end up avoiding an
7 even more expansive area of land, it goes beyond
8 the immediate and substantial footprint of the
9 Project. You've heard Chief Adam talked about
10 contamination concerns. And it also characterizes
11 a lack of confidence in the natural resources, it's
12 a lack of confidence in the health of the fish, a
13 lack of confidence in the health of the water.

14 Elder Charlie Voyageur talked about the
15 impact that gates have and how they just end up
16 seeming like areas that they can no longer go.

17 Heard about Marvin L'Homme-court talking about
18 the loss of the land base and the loss of
19 resources.

20 Raymond Cardinal talked about the effect of
21 gates. He talked about the effect of the noise, of
22 the larger land disturbance of typically an
23 avoidance of a larger area. He talked about the
24 impact of the loss of the land itself. He also
25 talked about going to an area, finding berry bushes

1 covered with dust and what he thought were
2 contaminants and his avoidance of those areas that
3 were once used.

4 You also heard Mr. Laviolette and
5 Ms. Deranger talk about gates and the effect they
6 have on their psyche and their desire to go into
7 areas.

8 You also heard Ms. Deranger talk about the
9 need for quiet space, how important it is to have a
10 quiet area and how important it is to try and
11 maintain that spiritual connection to the land.

12 And so all of those factors have to be
13 considered, in my submission, by this Panel. It's
14 not just about the immediate footprint. There is a
15 broader set of impacts.

16 And Marvin L'Hommeccourt aptly summarized the
17 effect that the oil sands operations have on the
18 land from ACFN's view and, in particular, what the
19 Project would do to the Muskeg River watershed, and
20 the impacts, the associated impacts on reliance on
21 the lands and wild resources. And he said:

22
23 "Now talking a little bit
24 about the muskeg..."

25

1 And this was on November 8th, starting at
2 page 2031:

3
4 "... now talking a little bit
5 about the muskeg. Everyone says
6 it's a mosquito infested bog, but I
7 think it's a living breathing
8 entity that houses numerous species
9 of animals and there's a whole
10 ecosystem that -- and the life
11 blood of that is the Muskeg River.

12 You know, I can give you an
13 analogy of if one were to poke
14 one's arm with a knife or
15 something, you'd say you'd have
16 adverse effect in the surrounding
17 tissues and ultimately the whole
18 body. So if you're to punch holes
19 in this living, breathing entity
20 here, certainly -- and ultimately
21 it will kill the Muskeg. And if
22 you were to move, manipulate the
23 Muskeg River, which is a big thing,
24 you're going to do to grab it and
25 move it somewhere else, and that

1 will certainly kill the surrounding
2 body of muskeg that sustains, you
3 know, moose and caribou, which of
4 course sustains us. And then, you
5 know, the smaller animals, which
6 depend on the muskeg, or the moose
7 to eat, willows, caribou have the
8 lichen or moss. And the lynx have
9 the rabbit and the rabbit eats the
10 willows, and, of course, you know,
11 and the birds feed on those pesky
12 mosquitoes in that muskeg, and of
13 course if we were to do all that
14 and manipulate all the surrounding
15 area, certainly have adverse effect
16 on that whole area and body."

17

18 So it's to say that it's not just about
19 redirecting a part of the river, it's much more
20 than that to the users of the land.

21 And in terms of the specific use, there's
22 been a lot documented, you heard from some of the
23 witnesses, but within the Local Study Area that was
24 set by ACFN, and that was an area of the
25 disturbance plus a five-kilometre radius, and they

1 chose that five-kilometre radius because it's the
2 distance a land user is likely to walk in a day
3 where they're out on the lands. And this is in
4 Dr. Candler's report at Exhibit 006-003I (sic),
5 [006-013I], there's 65 site-specific subsistence
6 values and that includes things like harvesting,
7 food plants, it includes high-value moose habitat.
8 There are 25 site-specific habitation values like
9 camps. Three cultural and spiritual value areas
10 like a burial area or a medicine collection area.
11 And then there's six transportation values like the
12 Muskeg River.

13 You've heard about the members who say, when
14 we've got a specific connection to the land and
15 it's gone, we're unable to pass place-specific
16 traditional knowledge on to future generations.
17 And so when we're talking about the impacts on
18 future generations, we're talking about the ability
19 of members to pass on that knowledge. And once a
20 landscape is changed like this, dug up, that
21 place-specific traditional knowledge gets lost.
22 You heard Elder Charlie Voyageur talk about that.

23 There's no evidence that Shell's Reclamation
24 Plan can reasonably be expected to recreate the
25 cultural or ecological landscapes that are

1 consistent with Aboriginal traditions of knowledge
2 and use. So it's not just about putting some trees
3 back there and hoping the animals come back. It's
4 a much broader effect.

5 The compensation lake proposed on the west
6 side of the river would also have a direct and
7 adverse impact on ACFN. You've heard how they are
8 concerned how it's going to affect the important
9 bison habitat, impact hunting areas and impact
10 berry and medicinal gathering areas. Pat Marcel
11 said, look, it's going to destroy their summer
12 habitat. Ray Cardinal said, look, I think it's
13 going to push the bison out of that area.

14 Getting back to the area around the Muskeg
15 River. The one other factor that wasn't mentioned
16 is how valuable the muskeg is to the high water
17 quality. And this is of course an increasing
18 concern of ACFN is the water quality in the region.

19 The Project is also going to remove a known
20 and regionally valuable wildlife movement corridor
21 along the Muskeg River. And the corridor is going
22 to be ineffectual, in our submission, because it's
23 going to be truncated at the northeast end by the
24 mine expansion pit. And the concern of ACFN is
25 that Shell hasn't provided evidence that the

1 genetic connectivity will be ensured. And
2 Mr. L'Hommecourt put it well when he said, look,
3 migratory animals such as moose and caribou just
4 don't have the luxury of a mine escort to get to
5 their habitat. I mean, in a way, it's humorous,
6 but frankly, it describes what's going to happen
7 with the habitat corridor here.

8 You've heard about migratory waterfowl, how
9 they are a key cultural resource and how it's
10 becoming increasingly difficult to find adequate
11 numbers of birds for harvesting.

12 You have also heard about, in addition to the
13 Project removing wetlands, it's also increasing the
14 area occupied by tailings ponds and by industrial
15 waterbodies. It increases the hazard for waterfowl
16 and other migratory birds.

17 Environment Canada said, look, you know, in
18 seriously adverse weather conditions, we don't
19 think that the bird deterrents work.

20 And ACFN is concerned that in respect of
21 birds landing on these tailings ponds that
22 operators have just not effectively managed
23 bird-oiling events and the concern that there is
24 still an inadequate capability to manage the risks
25 here.

1 Other impacts, you've heard about the area's
2 hydrology and groundwater flows. The flows in the
3 Athabasca River, how they are too low to support
4 the exercise of ACFN's Treaty and Aboriginal Rights
5 and the access, access, this is key, you can't
6 practice your rights if you don't have access. If
7 you can't get into an area, you can't practice the
8 rights.

9 And ACFN have done their own community-based
10 monitoring program and they found that at six of
11 the eight sample sites in 2011, water quality
12 levels were recorded as below the established
13 Aboriginal Base Flow of four feet. And that Base
14 Flow number comes from -- it's an average depth
15 which is a boat loaded with a moose, and that's the
16 depth you need in order to get in and out of an
17 area. You heard Jonathan Bruno talking about not
18 being able to get into Richardson Lake anymore.
19 It's nearly impossible. And it's an excellent
20 moose-hunting area. They can't get their boats in.
21 They can't get the moose loaded in. So that's
22 where the Aboriginal Base Flow comes from.

23 Dr. Carver's work has demonstrated that we've
24 had 20 or 30 percent less flow during the fall over
25 the last seven years than we've had in the historic

1 hydrograph, upon which the Phase I rules are based.

2 Fish have been a subsistence mainstay of
3 ACFN, both before and after the Treaty.

4 Residential locations and therefore reserves, the
5 Indian Reserves for local bands were typically in
6 areas where fish could be caught. And so when we
7 talk about getting access to the reserves, those
8 reserves are set up and historical records shows
9 this, the reserves are set in areas where there are
10 good fishing locations. And Reserve IR 201D, it
11 was intended specifically for fishing for ACFN
12 members.

13 And fish continue to be important today. As
14 Chief Adam noted, members can constantly fish for
15 pickerel, pike, and in the summer months they fish
16 for whitefish.

17 If approved, the Jackpine Mine Expansion
18 would destroy a large amount of fish habitat in the
19 Muskeg River watershed. Shell estimates the
20 physical habitat loss at closure in the Jackpine
21 Mine Expansion area alone to be 795,000
22 approximately metres squared, if one doesn't
23 include the loss of Kahago Lake. But with the
24 Kahago Lake, it's 1.65 million square metres.

25 And you've heard from DFO that Shell hasn't

1 applied, and certainly doesn't seem to consider,
2 habitat loss due to chemical deposition in its
3 compensation habitat that's planned for habitat
4 loss.

5 So Shell proposes to replace the loss of fish
6 and fish habitat with a compensation lake. In our
7 submission, the efficacy of compensation lakes in
8 terms of productive fish habitat, they are
9 unproven. It's not disputed that the proposed
10 Redclay south compensation lake would not produce
11 harvestable fish for a number of years. In large
12 part, due to methyl-- mercury contamination, pardon
13 me.

14 So even if fish were eventually safe to
15 harvest, the farming of the fish resource shouldn't
16 be confused with sufficient resources to support
17 the Treaty right to fish. There's no evidence
18 before this Panel that Dene people would find
19 fishing in such a compensation lake a suitable
20 alternative or substitute. It simply wouldn't have
21 any cultural meaning. It would be an imposed
22 feature on the geography, on ACFN's geography.

23 Many ACFN members already avoid harvesting
24 fish from the Athabasca River. The research by
25 Dr. Jones, what it demonstrates, and let's be clear

1 about this, the hypothesis is that contaminants are
2 higher in the fish near oil sands operations.
3 That's the hypothesis. That's what's been
4 demonstrated by the study. And so the study that
5 Dr. Jones presented is that the fish in the
6 vicinity have higher concentrations of larger
7 five-ring PAH in their bile than anywhere else in
8 the river system.

9 And so it's expected that if the Project is
10 approved as proposed, ACFN members will just
11 increasingly avoid fish downstream of the Project.

12 There are also direct and adverse cultural
13 and psychological impacts that arise and would
14 arise if the Project were approved. Chief Adam
15 talked a bit about ACFN culture being grounded in
16 respect for Mother Earth. He said: "When land is
17 taken up, we feel the hardships, we feel the pain
18 that comes with it." He talked about being the
19 seventh generation since the Treaty was signed. He
20 talked about feeling this great responsibility to
21 ensure that planning is effective for the next
22 seven generations. To make sure that development
23 that happens happens at a sustainable and
24 controlled pace. He talked about the effect of
25 land being taken up, the effect it has on ACFN

1 members' morale, on their spirit. People don't
2 just think about the land. They visit it. They do
3 things on it. They relate to the reciprocity
4 between themselves and what they see is the spirits
5 that inhabit the land and promote meaningful
6 orientation to the landscape. And so these aren't
7 just beliefs of the past. They are ongoing parts
8 of Dene awareness, of spirituality.

9 As Beatrice Deranger said: The land is "like
10 a church to some people." That's the kind of
11 effect it has when Dene people go out there.

12 You heard Lisa King testify that:

13
14 "The people feel the spirit
15 of the land. When the land is
16 disturbed they feel it. I took my
17 granny north..."

18
19 "... she closed her eyes and
20 she just blocked her head..."

21
22 "I just want to say it
23 affects, when you see the impacts
24 on land, it affects people in
25 different ways."

1

2

And:

3

4

"Depending on your spirit and
your strength, you can deal with
the impacts of development
differently."

8

9

10

"I just want to say it's our
duty as indigenous people on this
land to care for our Earth Mother."

11

12

13

And so ACFN has submitted studies to this

14

Panel.

15

16

17

18

19

20

21

Alistair MacDonald in his study, he talks
about the loss of ability of ACFN members to
meaningfully exercise their Treaty Rights and the
results this has causing adverse sociocultural
impacts including decreased ability to transmit
knowledge, the adverse impacts to community
well-being.

22

23

24

25

Pat Larcombe talks about in her encroachment
narrative, she talks about, you know, a decrease in
the population in a traditional resource species,
the need to travel further afield to harvest

1 species, or the increased competition can lead to
2 decreased harvesting opportunities.

3 And in the context of social-economic
4 effects, traditional food has been referred to as
5 the "anchor for cultural and personal wellbeing."
6 And consuming wild foods is fundamentally important
7 for personal and cultural wellbeing of Aboriginal
8 individuals and communities.

9 And when access to country foods is impacted
10 or lost, a subsequent effect is loss in personal
11 identity and deterioration in overall sense of
12 self.

13 You heard Jonathan Bruno, he's a young guy,
14 he talks about he has four children, he really
15 wants them to learn to live off the land. It's
16 extremely important to him. He really worries that
17 they are not going to be able to do, they are just
18 not going to have the ability to do so, the way the
19 lands and waters are being affected.

20 You heard Marvin L'Hommeccourt talk about how
21 being able to survive off the land, it's key, it's
22 a key part of the culture.

23 And so ACFN is subject to an increasing level
24 of adverse socio-economic effects and the effects
25 on their culture associated with rapid oil sands

1 development. And so this Project, this Project
2 itself, we're not talking about some other project,
3 we're talking about this Project, it is anticipated
4 and it's anticipated because of what's happened in
5 the last 10 years, it's going to have effects on
6 members passing on their culture, accessing
7 spiritual sites, a loss of tranquillity in
8 relationship with the land.

9 And some of the other social issues that
10 you've heard about, members that try to get
11 involved and work in the oil sands industry, you
12 know, as my friend Mr. Jeerakathil said, look,
13 there's no doubt that it brings economic benefits,
14 but you also have to consider some of the other
15 effects. And so you've got ACFN members going to
16 try and work in oil sands, like they report
17 disruptions in family and community dynamics
18 because of long shift rotations, income inequity,
19 isolation from their social support networks.

20 You heard Kim Marcel, the employee for ACFN
21 talk about some of the social issues she sees.

22 I'm going to talk a bit about now cumulative
23 impacts.

24 One of the challenges that ACFN sees with the
25 way these projects are approved is that cumulative

1 impacts are clearly occurring but they don't seem
2 to be adequately addressed in the context of the
3 Projects. And I believe one of you Panel Members,
4 I think it was you, Mr. Bolton, talked about how
5 everybody sees the cumulative impacts happening but
6 nobody says their project has any connection to
7 those cumulative impacts. And ACFN of course would
8 disagree with that, Shell's assessment in that
9 respect. What they would say is this Project would
10 substantially contribute to the cumulative impacts
11 of development in the region and it would do so in
12 a way that threatens the sustainability of ACFN's
13 culture, their way of life, exercise of their
14 rights.

15 Going back to what I mentioned at the
16 beginning, Treaty 8 promised the continued patterns
17 of use and occupation forever. The words are in
18 perpetuity. And they've already experienced
19 significant degradation of their ability to
20 exercise their rights and their traditional ways of
21 life.

22 And you're looking at the, in the Terms of
23 Reference, going back to a pre-industrial baseline
24 in terms of considering over the last 40 years in
25 terms of considering the cumulative impacts.

1 And so, again, the studies that we've put
2 forward in our submission assist you in
3 understanding that.

4 So it puts in context what members say when
5 they say, look, we can't just go somewhere else,
6 there are problems with just going somewhere else.

7 You know, the cultural importance of the
8 lands between the Peace-Athabasca Delta and Fort
9 McKay, which include the Regional Study Area here,
10 the importance of those lands has increased
11 dramatically in recent years and it's as a result
12 of a number of cumulative factors, and those
13 include:

14 Loss of significant portions of lands for
15 traditional activities, you know, starting with the
16 construction of the Bennett Dam.

17 There's been loss of other portions of
18 territory due to industrial development.

19 There's been the creation of Wood Buffalo
20 National Park, which of course goes back much
21 further, but until very recently ACFN was simply
22 not allowed to go in there and they don't feel the
23 connection to the land any longer, they've lost
24 that through generations.

25 Government regulations including the

1 prohibition of hunting migratory birds and bison
2 for periods of time.

3 The imposition of the registered fur
4 management regime.

5 You heard about Elder Charlie Voyageur
6 talking about how the trapline regime has, you
7 know, ended up being imposed on all of northern
8 Alberta. There's been a significant
9 relocation of populations of ACFN members.

10 And so the suggestion that ACFN members who
11 use and are connected to the area that the Project
12 is going to affect, that they can just go
13 elsewhere, is a complete and utter misunderstanding
14 of the impacts to the land that ACFN has already
15 faced.

16 You know, and we've heard a number of times
17 in this proceeding that Shell's been consulting
18 with ACFN for 15 years or so. Surely Shell would
19 understand by now that it's not an answer to say,
20 well, sure, we're using up this area, but you can
21 just go somewhere else. Surely through that
22 consultation process they will have understood that
23 that's just simply not a reasonable suggestion.
24 And so when Shell says, look, we listened to your
25 concerns, we take them into account, my suggestion

1 is, on that issue, they just don't, they do not, if
2 that's the answer, "you can go somewhere else."

3 So in short, place matters. Specific
4 locations and the resources and traditional
5 knowledge associated with specific locations is
6 really important. It's important to those who know
7 the land, who use those areas.

8 You know, prior to the construction of the
9 Bennett Dam, the Peace-Athabasca Delta was
10 resource-rich. It was a heavily relied-upon area
11 of ACFN traditional lands. There's reports of the
12 multitudes of fish, and the channels swarming with
13 muskrat, and large bison herd, and the waterfowl
14 densities were massive. And the Elders talk about
15 this as well. And this is in the study of
16 Footprints on the Land. It accords with the
17 traditional knowledge of the delta.

18 But the severe impacts on ACFN's way of life
19 after the dam was constructed was that many
20 families had to leave the bush for life in town.
21 And so the delta began to dry up and habitat was
22 reduced for key species, like muskrat, like moose,
23 waterfowl, and this has had long-lasting negative
24 impacts on ACFN members and other local people who
25 use the land.

1 And you've heard about the ongoing issues
2 with the ability to travel by water. And that's
3 been for a number of years and it's just getting
4 worse.

5 And so that's the area around Fort Chipewyan.
6 But you've also heard about the southern portion of
7 ACFN's traditional lands and how those lands are
8 being overwhelmed by industrial development and
9 it's most significantly from oil sands exploration
10 and extraction.

11 And virtually all of the lands that ACFN
12 includes within its Traditional Lands in Alberta
13 south of Wood Buffalo National Park and west of the
14 Saskatchewan border have been sold off by way of
15 oil sands leases. And so we're not talking about,
16 you know, this is a real prospect, a very real
17 prospect of exploration activity and development on
18 those tenures. We're not talking about some
19 hypothetical. Shell's witness panel talked about
20 how they are obligated to develop their tenures. I
21 think the wording by Mr. Roberts was, we're
22 obligated to our stakeholders, which include the
23 public and everybody else out there. And so this
24 isn't a hypothetical. These are leases that have
25 been given out over the lands that ACFN uses.

1 And so we'd ask that you keep that in mind.

2 I mean, this is also about cumulative impact.

3 And other pressures that have also been
4 experienced include, you know, increased
5 non-Aboriginal hunting, other recreational uses,
6 forestry, mineral development, uranium exploration,
7 conventional oil and gas development, and
8 increasing settlement and infrastructure
9 construction.

10 So that paints a, you know, in our
11 submission, a picture of the cumulative impacts
12 that have been occurring for years and will
13 continue to impact if this Project is approved.

14 The only herd of bison outside of Wood
15 Buffalo Park is the Ronald Lake herd. You've heard
16 about that. ACFN members worry that it's already
17 at dangerously low levels. I believe my friend
18 talked about the numbers within Wood Buffalo Park.
19 ACFN does not refer to those bison as bison they
20 use. They refer to the ones at Ronald Lake as the
21 ones that they would have access to.

22 Of course you've heard about the woodland
23 caribou, they are at dangerously low levels and
24 they are not available for traditional resource
25 use.

1 ACFN has led evidence to show that in this
2 proceeding that between 1992 and 2008 an average of
3 42 square kilometres, it's about 10 moose home
4 ranges, moose habitat has been removed each year
5 from ACFN's Regional Study Area and moose density
6 has declined substantially.

7 They've shown beaver habitat, experienced a
8 loss of about 6.3 square kilometres per year.

9 Waterfowl habitat, the loss of about 3.6
10 square kilometres a year. And while at the same
11 time the area of waterfowl hazard has more than
12 tripled.

13 And now the extirpation of woodland caribou
14 from the ACFN Regional Study Area is a near
15 certainty.

16 This comes out of the EMESIS report, effects
17 on traditional resources, and it's
18 Exhibit 006-0130. And those trajectories were
19 confirmed in a recent analysis.

20 And so all of those things, those are the
21 effects on the animals, the effects on use of the
22 lands, those are all effects that ACFN has suffered
23 and should be considered in terms of the cumulative
24 impacts that this Project will contribute to.

25 And that wraps up my segment of the argument.

1 And I wonder if we could just take a couple of
2 minutes just to assess where we're at?

3 THE CHAIRMAN: Yes, please go ahead, sir.

4 MR. MURPHY: Thank you. I wonder if we
5 could just take five minutes and I'll speak with my
6 friend, Ms. Gorrie.

7 THE CHAIRMAN: Fine. Sir, we need to take 5
8 or 10 minutes in any event, so this may be a good
9 time.

10 **(Brief Break)**

11
12 THE CHAIRMAN: Mr. Murphy, did you have
13 something?

14 MR. MURPHY: I thought I would just say
15 for the record that Ms. Gorrie has graciously
16 agreed to go next and my colleague, Ms. Biem, will
17 wrap up her submissions in the morning. She's
18 going to deal with three main subject areas: And
19 that's Shell's EIA, consultation with Shell, and
20 the mitigation, and then conclude.

21 THE CHAIRMAN: Thank you. Ms. Gorrie?

22 MS. GORRIE: Good evening, Panel. Before
23 I start, I was under the understanding that I
24 should probably go about through half my
25 submissions. Is there a timeframe in which I

1 should be closing by?

2 THE CHAIRMAN: An hour would be good. If
3 that's a convenient break point.

4 MS. GORRIE: I might be a little under an
5 hour where it actually breaks.

6 THE CHAIRMAN: That's fine.

7

8 **FINAL ARGUMENT OF THE OIL SANDS ENVIRONMENTAL COALITION,**
9 **BY MS. GORRIE:**

10 MS. GORRIE: So I'm aware that Madam Court
11 Reporter has been going hard all day, so I'm going
12 to do my best to talk slowly for her poor fingers.

13 So I'm not going to be addressing all the
14 issues in OSEC's pre-filed submissions; rather, I'm
15 going to focus on the key issues. And obviously I
16 won't be reviewing all the evidence due to time
17 constraints.

18 And as some of my colleagues have done, I've
19 provided a copy of our submissions to the court
20 reporter, and the citations will also be in there,
21 so I will make statements that are incorporated
22 into the transcripts by virtue of the fact that
23 I've already provided the citations. And I also
24 ask that my verbal comments take precedence where I
25 deviate from my speaking notes.

1 So OSEC submits that the evidence shows that
2 there are significant adverse effects from this
3 Project and there's an absence of adequate
4 assessment and demonstrated technically and
5 economically feasible measures to mitigate those
6 effects.

7 We also believe that this Project is not in
8 the public interest.

9 Now, to begin with, I'm going provide an
10 overview of the legal framework within which this
11 Panel must make its determination.

12 To start off with, the biggie, **CEAA (2012)**.
13 It includes a requirement to promote sustainable
14 development in order to achieve or maintain a
15 healthy environment and a healthy economy. This
16 includes a requirement to meet the needs of the
17 present without compromising or impairing resources
18 for use by future generations.

19 It also includes a requirement to ensure that
20 designated projects are considered in a careful and
21 precautionary manner to avoid significant adverse
22 effects.

23 Now, we're all very familiar with the Lower
24 Athabasca Regional Plan, or LARP, by now. It was
25 released this fall. And as set out in Section 15

1 of the **Alberta Land Stewardship Act**, regional plans
2 are binding on the Crown and on statutory
3 decision-makers.

4 Pursuant to the **Energy Resource Conservation**
5 **Act**, the Board must act in accordance with any
6 applicable regional plans. In other words, its
7 decisions must be consistent with LARP.

8 Now, an overriding goal of LARP is a healthy
9 environment and it requires that (as read):

10

11 "The environmental and social
12 impacts associated with long-term
13 opportunities for oil sands
14 development are carefully managed."

15

16 And one of the outcomes specified in LARP is
17 that landscapes are managed to maintain ecosystem
18 function and biodiversity. This includes an
19 objective to avoid or mitigate land disturbance
20 impacts to biodiversity.

21 It's also important to note that LARP does
22 not designate any areas within the region for
23 intensive use.

24 Now, this one's a mouthful, but the
25 Subregional Integrated Regional Plan for the Fort

1 McMurray-Athabasca Oil Sands Region, and I'll just
2 refer to it as the Fort McMurray IRP. And as
3 stated in LARP, Integrated Resource Plans represent
4 the Government of Alberta's Resource Management
5 Policy for Public Lands and Resources and are
6 intended to be a guide for decision-makers.

7 The Fort McMurray IRP is the guiding plan for
8 the region and includes population targets for some
9 species. It also includes the following wildlife
10 objectives:

11 To minimize damage to wildlife habitat and
12 where possible to enhance the quality, diversity,
13 distribution, and extent of productive habitat.

14 It also includes to maintain and if possible
15 to enhance the diversity, abundance and
16 distribution of wildlife resources for native
17 sustenance, recreational and commercial benefits.

18 Finally, it states that one of the objectives
19 is to protect wildlife species considered sensitive
20 to disturbance or environmental change and to
21 promote increased populations and distribution of
22 species considered rare or endangered.

23 Another statutory instrument is the
24 ***Environmental Protection and Enhancement Act***. Now,
25 the ***Alberta Land Stewardship Act*** does not repeal

1 the EPEA and therefore environmental protection is
2 still a legislative requirement. It's also
3 important to note that the EPEA adopts a principle
4 of sustainable development and recognizes the
5 importance of preventing and mitigating the
6 environmental impact of development.

7 Finally, there's the **Species at Risk Act** or
8 **SARA**. And this Act was enacted in part to fulfill
9 Canada's international obligations under the UN
10 Convention on Biological Diversity to protect and
11 conserve biodiversity. It's depended to provide
12 for the recovery of species at risk through various
13 means, including the protection of its habitat. In
14 fact the Act states that the habitat of a species
15 at risk is key to their conservation.

16 Now, there's a government document entitled
17 "Addressing Species at Risk: Considerations Under
18 the **Canadian Environmental Assessment Act**." And
19 this document was referenced by Environment Canada
20 in their submissions and was discussed during
21 cross-examination. And it states that **SARA**
22 requires that if a project subject to an
23 environmental assessment is carried out, measures
24 must be taken to avoid or lessen all adverse
25 effects of the project and monitor them consistent

1 with applicable recovery strategies and action
2 plans.

3 It also states that, thus:

4
5 "... in developing mitigation
6 measures ... the approach should be
7 systematic and rigorous."

8

9 Now that document also states that:

10

11 "Where there is uncertainty
12 regarding the likelihood or
13 possible significance of adverse
14 effects on wildlife species at
15 risk, it is best practice to adopt
16 a precautionary approach in the
17 analysis, given their
18 vulnerability."

19

20 Finally, it states that:

21

22 "From a practical
23 perspective, the obligations
24 under... **SARA** reinforce the need
25 for federal environmental

1 assessments to pay particular
2 attention to listed wildlife
3 species and their critical
4 habitat."

5
6 Now, in accordance with its provincial
7 legislative mandate, this Panel must determine
8 whether this Project is in the public interest of
9 Albertans having regard to the social and economic
10 effects and the effects on the environment.

11 Now, as held in ***Solex Gas Processing Corp.***,
12 which is an Alberta Court of Appeal decision (as
13 read):

14
15 "The scope of the public
16 interest is meant to be broad and
17 should not be interpreted
18 restrictively."

19
20 The Board in Cheviot Mine also held that (as
21 read):

22
23 "The establishment of need
24 does not automatically imply that
25 the project is in the public

1 interest. The degree of
2 environmental, social, and economic
3 impact must also be assessed."
4

5 In that case, the Board refused to permit
6 coal-mining activity in one portion of the project
7 area because it determined that the loss of the
8 value of the coal reserves would be outweighed by
9 the loss of the valued environmental components.

10 To assess whether a project is in the public
11 interest, the Panel must look at government policy
12 documents and legislation as they are the
13 expression of the public interest.

14 Now, before delving into the meat of my
15 submissions, it is important to note that
16 throughout the EIA and during the hearing, Shell
17 dealt with predictions of exceedances of thresholds
18 and guidelines by referring to monitoring data and
19 studies regarding impacts or pollution levels from
20 the last decade. Evidence of impacts or lack of
21 impacts during this past time period do not justify
22 another project or lack of effective mitigation.

23 The main purpose of the Environmental
24 Assessment is to enable development to be
25 sustainable and avoid environmental degradation.

1 This means the focus must be on the likely
2 impact of the project and other projects in the
3 area that will be operating at the same time.

4 And this will be in the future.

5 Such an approach is required in order to
6 adequately assess the project's effects and
7 determine whether it is in the public's interest.

8 So with that in mind, I will now turn to
9 addressing the key issues of concern for OSEC.

10 The first issue, and I think the only one
11 that I will be going through this evening, is
12 terrestrial impacts.

13 So when it comes to terrestrial resources,
14 Shell is hanging its hat on LARP. However, no
15 biodiversity or land disturbance standards have yet
16 been developed under LARP.

17 In the absence of those frameworks, LARP
18 currently provides no protection for terrestrial
19 resources in the RSA. It also fails to provide
20 guidance regarding the thresholds for important
21 considerations such as habitat loss, wildlife
22 abundance and land disturbance.

23 While LARP does contain some conservation
24 areas, virtually all of those areas fall outside
25 the RSA.

1 Now, Shell suggests that in the absence of
2 frameworks under LARP, there are no applicable
3 thresholds for assessing the impacts of the
4 Project. However, that is simply not the case.

5 It was held in the Total Decision Report that
6 the threshold for significance should be 20 percent
7 habitat loss for wildlife; but when dealing with
8 species at risk, any impacts are significant. Now,
9 such a precautionary approach is necessary as
10 species at risk are already threatened by habitat
11 loss and population declines.

12 As confirmed by Environment Canada, there
13 risk tolerance is very, very low. And one has to
14 be very conservative and precautionary when
15 assessing risk or determining impacts to them.

16 Shell is aware of the Total decision when it
17 undertook its assessment, yet it decided to
18 disregard it. But if they had applied those
19 thresholds, they would have determined that there
20 would be significant adverse effects for 16 of the
21 assessed species.

22 Direction regarding thresholds is also
23 provided by CEMA's Terrestrial Ecosystem Management
24 Framework, or TEMF, which we've also heard a lot
25 about during the hearing.

1 Now, while Shell does not take issue of the
2 Application of some aspects of the TEMF, it argues
3 that the Natural Range of Variability, or the NRV
4 aspect, should not (sic) be applied on a regional
5 scale and not to specific projects -- or, sorry,
6 should only be applied on a regional scale and not
7 to specific projects.

8 In short, Shell only wants to apply the TEMF
9 when it is convenient for them to do so.

10 The argument that TEMF should only be applied
11 on a regional scale was dismissed by the Panel in
12 Total Joslyn.

13 We also heard from Dr. Song with Environment
14 Canada that the TEMF is a valuable tool but that
15 the TEMF approach of setting management triggers at
16 10 percent below the NRV is not precautionary
17 enough.

18 If Shell had undertaken an assessment of the
19 NRV, it likely would have concluded that the RSA
20 level, 13 of 19 species assessed, would be more
21 than 10 percent below the Natural Range of
22 Variability.

23 The Fort McMurray IRP also provides some
24 guidance regarding thresholds. It contains a
25 population target for moose which Shell failed to

1 consider in its assessment but which it later
2 admitted during cross-exam that it would not be
3 met.

4 While Shell takes the position that we need
5 to wait for LARP to determine thresholds, it also
6 makes several references to the concept of critical
7 thresholds in support of the notion that habitat
8 loss up to the range of 70 to 90 percent is
9 acceptable and that it should be used as a guide
10 when assessing effects.

11 To put it simply, relying on the concept of
12 critical thresholds is the opposite of
13 precautionary.

14 Mr. Wiacek with Environment Canada stated
15 that 70 to 90 percent thresholds is not
16 precautionary, and that thresholds can vary
17 depending on various factors, including the species
18 at issue and the study area.

19 He also stated that there is a lot of
20 uncertainty around thresholds and that habitat loss
21 in the range of 20 to 40 percent can cause a change
22 in a population trajectory. He also cautioned the
23 Panel in terms of how they apply such thresholds.

24 In sum, the critical threshold approach,
25 which could take a species to the brink of

1 extinction, is clearly inconsistent with CEAA and
2 **SARA**, both of which require precaution be taken.

3 Alternatively, if Shell's argument that no
4 threshold exists is accepted, we submit that in
5 such circumstances, the Panel should act
6 particularly cautiously in assessing the effects of
7 the Project.

8 And there's an EUB *Decision 2001-33* that we
9 reference in our submission. And there, the Board
10 states:

11
12 "The existence of regulatory
13 standards is an important element
14 in deciding whether potential
15 adverse impacts are acceptable and
16 whether a proponent has
17 satisfactorily accounted for these
18 externalities ... Where no
19 sanctioned thresholds exist, it is
20 especially critical that the Board
21 weigh the impact of potential
22 adverse effects on the public and
23 the efficacy of the mitigative
24 measures designed by a proponent to
25 minimize these impacts to

1 acceptable levels."

2

3 Shell has also erred by disregarding the
4 impacts of the Project at the LSA level in favour
5 of an RSA level approach. And my friend discussed
6 this earlier in his submissions, but I'm going to
7 discuss this as well because I think it's a very
8 important aspect of the assessments.

9 As confirmed by Shell, there is no policy or
10 legislative basis on which to take such an
11 approach. In fact, again, the Total Panel said
12 that it's unusual to use the RSA for determining
13 significance of effects and that the LSA is
14 normally used to assess effects of a Project.

15 Shell attempts to pull support for an RSA
16 approach by using inappropriate analogies and by
17 citing documents that do not support that
18 proposition.

19 The **EPEA** and CEAA both indicate that there's
20 a requirement to provide a project-specific
21 assessment along with a cumulative effects
22 assessment. While the RSA is the appropriate scale
23 for a cumulative effects assessment, it is not the
24 appropriate scale for a project-specific one.

25 And Mr. Wiacek with Environment Canada summed

1 it up best when he said:

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"The issue I have is in determining project effects. Shell has only assessed the significance of Project effects at the scale of the Regional Study Area. And part of the justification they give is they reference the Cumulative Effects Assessment Guide, which deals with cumulative effects and not project effects. And actually, when you review that document, it actually talks about the potential for significance of local effects and their contribution to regional effects.

So it's our opinion that the significance of project effects could be evaluated at both the local and regional scales to provide a complete understanding of what the Project effects are and the appropriate mitigation measures for the Project."

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So what we have here is really an approach by Shell that seems to expand the scale as far as is necessary in order to make very real impacts seem minor. In order to determine significance, not only did Shell look at the RSA level, it expanded its scope of assessment to include available trend information not only within Alberta but in Canada as well.

Such an approach is contrary to the legislative requirements for conducting EAs. And again, I promise I won't do much more quoting from Mr. Wiacek, but he did make an interesting statement:

"And I think that misrepresents how significance is typically conducted or determined in Environmental Assessment. The scope of the Environmental Assessment is the Local Study Area and the Regional Study Area, but this has been expanded to include the provincial and the national scale, which I think can be very

1 misleading in determining
2 significance."

3

4 And on that basis, Mr. Wiacek then goes on to
5 state that he is not satisfied with Shell's
6 determination of significance.

7

8 Shell has tried to dance around the
9 information that has been provided not only by
10 scoping out to the RSA or even the provincial or
11 national level, but also by applying completely
12 subjective tests to assess significance of effects.

13

14 As mentioned earlier, they apply the
15 ecological context to determining significance and
16 in the case of cumulative effects they look at
17 whether they compromise resilience of a population
18 such as that they are no longer likely to be
19 self-sustaining.

20

21 Now, Shell provides no analysis in the
22 assessment to show how they assessed the ecological
23 context or determine that species are still
24 self-sustaining or resilient.

25

26 Shell stated numerous times during the
27 cross-examination that they applied their
28 professional judgment in order to determine whether
29 the effects were significant.

1 But Mr. Wiacek stated that it is very
2 difficult to determine whether a species is
3 self-sustaining.

4 Despite that fact, Shell was somehow able to
5 make that determination simply by applying its
6 professional judgment with no documentation to
7 support it in the assessment.

8 So in reality, Shell undertook a subjective
9 analysis that is not delineated in the Application.
10 Subjective professional judgement of the Proponent
11 that is unsupported by evidence should not guide
12 decision making and should be disregarded by the
13 Panel.

14 The true ecological context is an LSA and RSA
15 that has been adversely affected. Shell has
16 admitted that the LSA will be completely disturbed
17 during the life of the Project but for a 500-metre
18 buffer.

19 In fact, from Base Case to Project Case,
20 91 percent of wetlands in the LSA will be lost or
21 altered with the majority of these being peatlands.

22 There's also evidence that the RSA generally
23 is highly impacted and will be increasingly so as
24 approved development proceeds. For example, 13 of
25 19 assessed species will lose more than 20 percent

1 of their high value habitat within the RSA in the
2 Planned Development Case Cumulative Effects
3 Assessment. And that's to say nothing of moderate
4 and low quality habitat which we've seen has been
5 considered in previous assessments.

6 Now, these impacts are also conservative as
7 they do not include reasonably foreseeable
8 disturbances such as mandatory exploration
9 disturbances on oil sands leases.

10 Evidence referenced during this hearing,
11 including the Government of Alberta Athabasca Oil
12 Sands Projects and Upgrader Map, the ALCES III
13 Scenario Modelling, the Dover EIA, the TEK EIA, and
14 TEMF, all provide evidence of a region that is
15 highly impacted and will be increasingly impacted
16 as more projects appear on the landscape.

17 To put it in perspective, back in 2007, the
18 TEMF concluded that we have already or will soon
19 have species going below minus 10 percent the
20 Natural Range of Variability. That was five years
21 ago, before we had many of the existing and
22 approved projects that are considered in this
23 assessment. At that time, the TEMF also called for
24 immediate management action to reverse the
25 declines, which hasn't happened, so presumably the

1 declines are continuing. More recent EIAs within
2 the RSA confirm that to be the case. For example,
3 the TEK analysis determined that a number of
4 species were being driven well below the lower
5 boundary of their NRV, some down as low as 40 to
6 50 percent below.

7 Now, Shell has not provided information to
8 support its assertion that the RSA has the carrying
9 capacity to handle more development. Rather,
10 Environment Canada has stated that it is concerned
11 about the level of habitat loss that Shell has
12 identified in the Cumulative Effects Assessment
13 both at their Base Case and their Planned
14 Development Case, and that those numbers appear to
15 be very high.

16 Environment Canada also stated that there
17 have already been substantial effects on habitat
18 and that there is no evidence that there would be
19 surplus habitat available within the RSA.

20 Now, this morning, Mr. Denstedt has stated
21 that looking at effects from the Pre-Industrial
22 Case to the Planned Development Case should not be
23 considered by the Panel and that that assessment is
24 only useful for regional planning purposes. With
25 all due respect, that assumption is ludicrous. It

1 ignores the fact that the Panel's Terms of
2 Reference specifically require a cumulative effects
3 assessment that includes a Pre-Industrial Case and
4 future foreseeable projects and activities. It
5 also ignores the duty of the Panel to assess the
6 significance of those cumulative effects.

7 The Planned Development Case Cumulative
8 Effects Assessment prepared for this Project cannot
9 simply be dismissed by the Panel, it's something
10 that should be considered on another day by another
11 decision maker.

12 It was prepared for this Project Assessment
13 in order to enable this Panel to discharge its duty
14 to assess whether the cumulative effects outlined
15 in the Planned Development Case is significant.

16 As set out in the CEAA Practitioners Guide,
17 cumulative effects assessment are done to ensure
18 the incremental effects resulting from the combined
19 influence of various actions are assessed.

20 The incremental effects may be significant
21 even though the effects of each action, when
22 independently assessed are considered
23 insignificant.

24 Now, clearly the scenario presented in the
25 cumulative effects assessment is one where

1 incremental effects are significant, of which this
2 Project is a contributor.

3 So despite the significant impacts to
4 terrestrial resources, Shell has not proffered
5 measures that will adequately mitigate the impacts
6 of the Project on terrestrial resources. Shell is
7 relying substantially on reclamation efforts to
8 mitigate the effects of the Project. However, no
9 evidence has been presented that reclamation
10 efforts will likely be successful.

11 As stated by Mr. Wiacek during the hearing:

12

13 "And there's also a great
14 deal of uncertainty regarding
15 reclamation in terms of whether or
16 not certain species, including
17 species at risk, will recolonize
18 some of those habitats in the
19 long-term; right now, we don't have
20 any evidence to suggest that that
21 will occur."

22

23 Such uncertainty exists for various
24 terrestrial resources, including old-growth
25 forests. Now even assuming that the species that

1 rely on old-growth forests are able to recolonize
2 those areas after reclamation, there will be a
3 considerable time lag before recolonization,
4 basically in excess of 100 years. But Shell has
5 not provided mitigation for the species that rely
6 on that habitat in the interim, other than to
7 suggest that they can find suitable habitat
8 somewhere else in the RSA.

9 That proposal is not borne out by the
10 evidence as the RSA does not have surplus habitat
11 available to support those species.

12 In its Opening Statements back in Fort
13 McMurray, Shell claimed that the Project will have:
14 "No unacceptable long-term environmental effects
15 upon closure and reclamation." Such a conclusion
16 cannot possibly be drawn. For example, Shell
17 admits that it anticipates large decreases in
18 wetlands given their current inability to be
19 reclaimed.

20 Shell also stated that with losses of
21 wetlands come losses in high biodiversity potential
22 area, reductions in rare plants in these wetlands,
23 and reductions in habitats for species like rusty
24 blackbird, horned grebe and yellow rail.

25 In general, Shell admits that the reclaimed

1 landscape will support a lower level of
2 biodiversity comparative to the predevelopment
3 landscape.

4 Despite such losses, Shell refuses to
5 implement sufficient mitigation. As pointed out by
6 Environment Canada:

7
8 "There's insufficient
9 mitigation to avoid and lessen
10 effects on species at risk and
11 therefore our recommendation is for
12 additional mitigation."

13
14 Shell has refused to include additional
15 mitigation in the form of compensation offsets.

16 Shell has refused despite the fact that there
17 will be losses that are irreversible, particularly
18 for peatlands.

19 Shell has refused despite the fact that
20 numerous species rely on such habitat including
21 species at risks.

22 Shell has refused despite the Federal
23 Government's request for additional mitigation and
24 its suggestion that offsets should be considered in
25 the event that effects are not avoided or

1 minimized. Which we know will not be happening as
2 planned in this assessment.

3 Finally, Shell has refused despite the fact
4 that Environment Canada stated that Shell has not
5 provided enough in the way of mitigation that it
6 does not have to consider offsets.

7 Shell's rationale for failing to include
8 offsets as part of its mitigation is that the
9 effects won't be significant, except for woodland
10 caribou and the black-throated green warbler. So
11 it does not get to determine whether effects are
12 significant, thereby necessitating mitigation.

13 Further, such an approach would be contrary
14 to the Total decision which found that any impacts
15 on species at risk are significant.

16 Also, as required under **SARA**, all adverse
17 effects of species at risk should be mitigated.

18 Shell provides a similar rationale for
19 refusing to avoid drawdown effects to the unique
20 lenticular patterned fen in the northeastern corner
21 of the LSA during construction and operation, of
22 which 16 percent will be directly affected by mine
23 clearing and the remaining 84 percent being
24 affected by drawdown.

25 Although the fen may provide suitable habitat

1 for several federally-listed species, including the
2 yellow rail, Shell is refusing to avoid drawdown
3 effects to the fen as recommended by Environment
4 Canada because, in its opinion, it is very unlikely
5 that resilience of yellow rail populations in the
6 RSA has been affected.

7 As just outlined, such an approach is
8 unacceptable and not supported in law. In any
9 event, Shell has not provided sufficient evidence
10 to support that assertion.

11 Finally, Shell employs a circular argument to
12 get around having to provide mitigation measures.
13 So it states that effects of the Project must be
14 assessed at the RSA level. But then RSA impacts
15 are best addressed by LARP. But there are no LARP
16 protected areas in the LSA, maybe 2 per cent, and
17 there are also no management frameworks in place.
18 The end result is that there's no mitigation of
19 effects.

20 In sum, we submit that given the evidence, it
21 cannot be concluded that adequate mitigation has
22 been proffered by Shell with respect to terrestrial
23 impacts.

24 If the Panel conclude that the Project is in
25 the public interest, we submit that approvals for

1 the Project should not be granted until the
2 biodiversity and landscape management frameworks
3 are implemented.

4 Shell should also be required to develop and
5 submit a verifiable mitigation strategy for
6 compensatory offsite offsets in order to achieve a
7 Net Positive impact on habitat for species at risk
8 and other valued wildlife species.

9 A similar mitigation plan should also be
10 included for wetlands and old-growth forests as a
11 condition to any approvals. And we provide details
12 of what should be included in such a plan in our
13 October 1st submissions.

14 We also ask that the Panel and participants
15 should be provided with an opportunity to review
16 and test the adequacy of those mitigation
17 strategies prior to granting of any approvals.

18 So, Mr. Chairman, it's only been half an
19 hour, but I'm almost halfway through. I look to
20 you for direction as to what you prefer to do.

21 THE CHAIRMAN: That's fine. Ms. Gorrie,
22 thanks for -- thanks everyone, in fact, for helping
23 us along with the schedule, and I was going to ask
24 if there would be any objection to starting at 8:00
25 tomorrow? I don't see anyone... Oh-oh.

1 MR. PERKINS: I don't rise to object, sir.
2 I just thought I might mention this. We've juggled
3 the schedule as counsel had discussed it, and it
4 has impacts on tomorrow. Specifically, OSEC was to
5 follow Mikisew Cree and also Ms. Johnston, and I
6 wonder if it's worthwhile for counsel to discuss
7 Ms. Gorrie, in particular, jumping the queue to
8 wrap up -- I shouldn't say it that way -- to
9 complete her argument before those other parties
10 can proceed.

11 THE CHAIRMAN: Well, I was going to give
12 Ms. Gorrie the option because if she carries on,
13 then she gets a double-whammy; she has to go late
14 and then she has to start early. So, yes, if
15 counsel can work that out, that would be great.
16 So we'll start at 8 o'clock tomorrow. Have a
17 good evening.

18
19 **(The Hearing Adjourned at 6:30 p.m.)**
20 **(The Hearing to Reconvene at 8:00 a.m.**
21 **on Wednesday, November 21st, 2012)**
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REPORTER'S CERTIFICATION

I, Nancy Nielsen, RCR, RPR, CSR(A), Official
Realtime Reporter in the Provinces of British Columbia
and Alberta, Canada, do hereby certify:

That the proceedings were taken down by me in
shorthand at the time and place herein set forth and
thereafter transcribed, and the same is a true and
correct and complete transcript of said proceedings to
the best of my skill and ability.

IN WITNESS WHEREOF, I have hereunto subscribed
my name this 22nd day of November, 2012.

Nancy Nielsen, RCR, RPR, CSR(A)
Official Realtime Reporter

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