

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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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.

1

2

EXHIBIT 006-031: RESPONSE FROM MR. BRUCE MACLEAN

3

4

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

5

6

EXHIBIT 006-032: RESPONSE FROM DR. CANDLER

7

8

MR. PERKINS: For OSEC, Dr. Schindler's
response, if we could have 017-051.

9

10

11

EXHIBIT 017-051: DR. SCHINDLER'S RESPONSE

12

13

MR. PERKINS: And as a separate number, and
I hope I describe this correctly, the Rasmussen
World Class Graph, 017-052.

14

15

16

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EXHIBIT 001-052: RASMUSSEN WORLD CLASS GRAPH

18

19

MR. PERKINS: And finally, sir, the reply
from Shell, if we could have exhibit number 001-116
for that, sir.

20

21

22

23

EXHIBIT 001-116: REPLY FROM SHELL

24

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 OF SHELL CANADA, BY MR. DENSTEDT:**

8 **INTRODUCTION**

9 MR. DENSTEDT: Thank you, Mr. Chairman, and
10 Members. I'm pleased to be here today to present
11 final argument on behalf of Shell Canada Limited
12 for the Jackpine Mine Expansion Project, which I
13 will refer to generally as "the Project" in my
14 remarks today.

15 I've provided a copy of my notes to the Court
16 Reporter and I'd ask that the headings and the
17 evidentiary references be included in the
18 transcript so that I need not to refer to them as I
19 go. Where I deviate from my notes, I would ask
20 that my oral remarks be reflected in the
21 transcript.

22 Mr. Chairman, developing an oil sands mining
23 project is not an easy task. It requires financial
24 strength to provide the financial wherewithal to
25 ensure processes to capitalize and execute a

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

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

12 Shell has been involved in the oil sands
13 since the 1950s. ¹ Transcript Vol. 3, pg. 216 Shell already
14 operates the Muskeg River Mine and the Jackpine
15 Mine Phase I, and has demonstrated that it can
16 operate oil sands projects in a responsible way.

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

19 ² Transcript Vol. 3, pg. 218

20 In 2011, Shell was awarded CAPPs Health and
21 Safety Performance Award for its oil sands
22 operations. ³ Transcript Vol. 3, pg. 220

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

1 Shell has been working with regulators and
2 stakeholders for more than six years to study the
3 potential impacts of this Project and optimize
4 plans to avoid or minimize those affects.

5 The reason that the Pierre River Mine was
6 combined with this Project for the purposes of the
7 EIA was to address stakeholders' and regulators'
8 desire to see Shell's full development plans for
9 the oil sands. ⁴ Transcript Vol. 3, pg. 234

10 Shell's testimony was that the baseline
11 studies for this Project were the most extensive
12 that have ever been conducted for oil sands
13 projects. ⁵ Transcript Vol. 7, pg. 1410 Shell has responded
14 to more than 1500 Information Requests from
15 regulators and stakeholders and filed more than
16 20,000 pages of documentation in support of this
17 Project. ⁶ Transcript Vol. 3, pg. 250; Exhibit 001-006, 001-009,
18 001-011, 001-051, 001-063

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

1 environmentally and socially acceptable manner.

2 For the reasons I am going to discuss,
3 Mr. Chairman, Shell has clearly demonstrated that
4 this Project is in the public interest and should
5 be approved.

6 So let me start with the nature of this
7 application.

8 **NATURE OF THE APPLICATION**

9 First of all, Shell is applying to the Energy
10 and Resources Conservation Board and Alberta
11 Environment and Sustainable Resource Development to
12 amend and renew the Jackpine Mine approvals in
13 order to expand the already existing Jackpine Mine
14 development, and the area underlying the oil sands
15 resources to increase the production by 100,000
16 barrels per day to an average nominal capacity of
17 300,000 barrels per day. ⁷ Transcript Vol. 3, pg. 235

18 The proposal will allow for a development of
19 the resource contiguous to the already approved
20 Jackpine Mine in a northerly direction
21 incorporating Leases 88, 89, AT-36, 15 and 631.
22 The additional mining area and equipment,
23 processing facilities and other infrastructure will
24 extend the life of the Jackpine Mine to 2050.
25 Updated and expanded tailings management,

1 reclamation and closure plans for the Jackpine Mine
2 are also included in the Application. ⁸ Transcript

3 Vol. 3, pg. 235, Exhibit 002-004, Adobe 2

4 To implement the proposed development, Shell
5 will require:

6
7 - An amendment to ERCB approval
8 number 9756C for the additional
9 mining tailings and processing
10 facilities pursuant to Section 13
11 of the ***Oil Sands Conservation Act***.

12 ⁹ R.S.A. 2000, c. O-7, s. 13

13 - It also requires renewal and
14 expansion of the 10-year operating
15 EPEA approval and renewal ¹⁰ R.S.A.

16 2000, c. E-12, s. 67 and 70; Exhibit 002-004,

17 Adobe ²; and

18 - Amendment of the Jackpine
19 Mine ***Water Act*** approval. ¹¹ R.S.A. 2000,

20 c. W-3, s. 49-51, 54 and 59; Transcript Vol. 3,

21 pg. 242

22
23 Shell will also require approvals from
24 various federal regulators including:

25

1 - A new authorization under
2 Section 35(2) of the **Fisheries Act**
3 for the harmful alteration and
4 destruction of fish habitat in the
5 new project area; ¹² R.S.C., 1985, c. F-14,
6 s. 35(2); Transcript Vol. 3, pg. 243, Exhibit
7 005-002, Adobe 1 and.

8 - A river crossing approval
9 under Section 5 of the **Navigable**
10 **Waters Protection Act** for bridge
11 and utilities crossings. ¹³ R.S.C.,
12 1985, c. N-22, s. 5; Transcript Vol. 3, pg. 243,
13 Exhibit 001-029, Adobe 1

14
15 In addition, Shell will apply for a variety
16 of ancillary approvals if the expansion is found to
17 be in the public interest. And the potential
18 environmental impacts of these ancillary works have
19 been included in the Environmental Impact
20 Assessment that is before this Panel. ¹⁴ These include
21 approvals from Transport Canada for the diversion of the Muskeg River,
22 pursuant to section 23 of the *Navigable Waters Protection Act*; from the
23 Alberta Utilities Commission to construct and operate co-generation power
24 plants, pursuant to section 11 of the *Hydro and Electric Energy Act* (R.S.A.
25 2000, c. H-16, s. 11); an amendment or new Mineral Surface Lease under

1 section 20 of the *Public Lands Act* (R.S.A. 2000, c. P-40) for the new
2 project area; an amendment to development permit No. 2006-0374 pursuant to
3 the Regional Municipality's Land Use Bylaw 99/059; and historical resource
4 clearances under the *Historical Resources Act* (R.S.A. 2000, c. H-9)

6 **FRAMEWORK FOR THE REVIEW**

7 Let me start with a review of the legal
8 framework and the Joint Review Panel that the Joint
9 Review Panel is operating under, and the dual roles
10 and responsibilities of this Panel. And I'll
11 briefly go through some of the specific
12 requirements of a CEAA review and an EIA under the
13 **EPEA** as I deal with the merits of the Application.

15 **Purpose of Environmental Assessment**

16 Environmental Assessment is the first formal
17 step towards project approval and is required to
18 ensure environmental matters are considered early
19 in the Project's planning stage to both protect the
20 environment and to avoid the waste of resources.

21 One of the reasons for conducting an
22 Environmental Assessment early in the planning
23 process is so that the Environmental Assessment can
24 influence design decisions, execution plans,
25 mitigation, and monitoring. It is well accepted in

1 Canadian jurisprudence that environmental
2 assessment is a planning tool used to help achieve
3 the goal of sustainable development by providing an
4 effective means of integrating environmental
5 factors into planning and decision-making processes
6 early in the planning stage of projects. ¹⁵ *Bow Valley*
7 *Naturalist Society v. Canada (Minister of Canadian Heritage)*, [2001] 2 F.C.
8 461 (C.A.) at para. 17

9 Under the **Canadian Environmental Assessment**
10 **Act**, the focus of an assessment is to determine
11 whether the likely environmental effects of a
12 proposed Project are significant and, if so,
13 whether they can be justified. Information that is
14 produced through the Environmental Assessment
15 process that shows broader cumulative effects
16 through the region, particularly information
17 showing changes from pre-industrial conditions to a
18 Planned Development Case is useful to inform
19 regional planning but should not be used to make
20 decisions on whether a specific project is in the
21 public interest and should be allowed to proceed.

22

23 **Joint Process**

24 In January of 2007, Shell filed a Project
25 Description for the Project and the Pierre River

1 Mine Project with the Federal and Provincial
2 Governments. The Draft Terms of Reference for the
3 EIA were provided for stakeholder and regulator
4 input, including input from Aboriginal groups,
5 Environment Canada, Health Canada, and Fisheries
6 and Oceans Canada. ^{16 Exhibit 004-003, Adobe 3} These Terms
7 of Reference were finalized in November of 2007 and
8 the Application for this Project was filed the
9 following month.

10 Between 2007 and 2010, Shell responded to
11 three mounds of supplemental information requests
12 from the ERCB and ESRD, as well as Information
13 Requests from Environment Canada, Health Canada,
14 DFO, Natural Resources Canada, and Transport
15 Canada. Shell also responded to hundreds of
16 technical review questions from Aboriginal groups.
17 ^{17 Exhibit 001-026; Exhibit 001-032; Exhibit 001-050; Exhibits 001-039A}
18 through K In October of 2010, Alberta Environment
19 deemed the EIA complete. ^{18 Transcript Vol. 3, pg. 249} In

20 December of 2010, the review of the Project was
21 referred to a Federal Review Panel on the request
22 of the Minister of Fisheries and Oceans.

23 A Joint Review Panel agreement between the
24 ERCB and the Government of Canada was finalized on
25 September 13th of 2011 to allow a joint review of

1 this Project. ^{19 Exhibit 002-024, Adobe 3} The Agreement
2 sets out the mandate and authority of the Panel,
3 its composition and project review guidelines.
4 This joint review must satisfy the requirements of
5 the CEAA, the ***Oil Sands Conservation Act***, and the
6 ***Energy Resources Conservation Act***. The Panel has
7 distinct obligations under each of those Acts.

8 ^{20 Transcript Vol. 1, pg. 6, Exhibit 002-024, Adobe 4}

9

10 **The Joint Review Panel's Role as the ERCB**

11 As the ERCB, the Panel is guided by the
12 purposes outlined in the ***Oil Sands Conservation***
13 ***Act***, and let me just run through those purposes for
14 you this morning:

15 - To effect conservation and prevent
16 waste of the oil sands resources of Alberta.

17 - To ensure orderly, efficient and
18 economical development in the public interest of
19 the oil sands resources of Alberta.

20 - To assist the government in controlling
21 pollution in the development and production of the
22 oil sands resources of Alberta; and

23 - To ensure the observance in the public
24 interest of safe and efficient practices in the
25 exploration for, and the recovery, storing,

1 processing and transporting of oil sands discard
2 crude bitumen derivatives of through bitumen and
3 oil sands products. ²¹ *Oil Sands Conservation Act*, Revised

4 Statutes of Alberta 2000, Chapter O-7, s. 3, Adobe 7, 8

5 While performing this ERCB function, the
6 Panel must also have regard to Section 3 of the
7 ***Energy Resources Conservation Act*** which requires
8 the ERCB to give consideration to whether this
9 Project is in the public interest having regard to
10 the social and economic effects of the Project and
11 the effects of the Project on the environment.

12 ²² *Energy Resources Conservation Act*, Revised Statutes of Alberta 2000,

13 Chapter E-10, s. 3, Adobe 6

14 It's a blend of all those obligations that
15 this Panel must fulfill as the ERCB.

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

23 In determining whether a proposed energy
24 development, in this case the expansion of the
25 Jackpine Mine, is in the public interest, the Panel

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

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

13

14 **The Joint Review Panel's Role under the CEAA**

15 Under the CEAA, and the agreement, the Panel
16 must conduct an environmental assessment of the
17 Project by collecting and considering the evidence
18 it considers is necessary to make recommendations
19 on whether the Project is likely to result in
20 significant adverse environmental effects. ²³ *Canadian*
21 *Environmental Assessment Act, 2012, S.C. 2012 c. 19 s. 52, s. 22, Adobe 14*

22 This Panel must consider the following issues
23 as part of its CEAA mandate:

- 24 (a) the need for and purpose of the Project;
25 (b) alternatives to the Project and

1 alternative means of carrying out the Project;

2 (c) environmental effects of the Project,
3 including the likelihood and significance of those
4 effects within temporal and spatial boundaries;

5 (d) impacts and the capacity, impacts on the
6 capacity of renewable resources to meet the needs
7 of present and future generations;

8 (e) possible accidents and malfunctions from
9 the Project; and

10 (f) Shell's proposed monitoring and adaptive
11 management programs.

12 Shell has addressed all of these matters in
13 its evidence filed with the Panel.

14

15 **The Joint Review Panel's Mandate regarding Aboriginal**
16 **Rights and Interest**

17 Finally, I would like to briefly outline the
18 Panel's responsibilities with respect to Aboriginal
19 issues.

20 Section 6 of the Joint Review Panel Agreement
21 allows the Panel to receive information from
22 Aboriginal groups related to the nature and scope
23 of their Aboriginal and Treaty Rights in the
24 Project area, as well as the potential adverse
25 environmental effects on those rights. ²⁴ Exhibit

1 002-024, Adobe 5

2 The Terms of Reference for the Panel also
3 require that the Panel consider any evidence
4 concerning potential Project effects on established
5 or asserted Aboriginal or Treaty Rights, including
6 the potential effects on traditional land and
7 resource use and access into areas used for
8 traditional uses, and Shell's plans to mitigate any
9 such effects. ^{25 Exhibit 002-024, Adobe 12}

10 This information must be considered by the
11 Panel in determining whether the Project is likely
12 to result in significant adverse environmental
13 effects, but the agreement is clear, that the Panel
14 is not required to determine the validity of any
15 asserted rights, the scope of the Crown's duty to
16 consult, or whether the Crown has met its duty to
17 consult. ^{26 Exhibit 002-024, Adobe 5}

18
19 **THE ISSUES - OVERVIEW**

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

23 (a) the Need for the Project;

24 (b) Alternatives to the Project and means of
25 carrying out the Project;

- 1 (c) the various environmental issues;
- 2 (d) Aboriginal consultation and impacts on
- 3 traditional land and resource use;
- 4 (e) regional, socio-economic impacts and
- 5 infrastructure and intensity of development; and
- 6 finally
- 7 (f) technical operations and resource
- 8 recovery issues.

9 Shell submits that all of these issues have

10 been addressed in its evidence and the Panel can

11 rely on the conclusion in Shell's EIA which is a

12 comprehensive and conservative assessment of the

13 Project's potential impacts.

14 Further, we provided a Table of Concordance

15 for this argument, and the Panel's list of issues

16 that was set out last Friday, and I'd ask that it

17 be included as an addendum to this argument.

18

19 **PROJECT NEED, PURPOSE AND ALTERNATIVES**

20 So let me start with the need for the Project

21 and the Project's alternatives.

22 Shell analyzed the need for the Project as

23 well as alternatives to and alternative means of

24 carrying out the Project in accordance with the

25 Canadian Environmental Assessment Agency's

1 Operational Policy Statement on need, purpose and
2 alternatives. ²⁷ CEAA Operational Policy Statement: Addressing "Need
3 for", "Purpose of", "Alternatives to" and "Alternative Means" under the
4 *Canadian Environmental Assessment Act*. Available online:
5 <[Http://www.ceaa-acee.gc.ca/Content/5/C/0/5C072E13-8440-4123-9F66-85589234C2](http://www.ceaa-acee.gc.ca/Content/5/C/0/5C072E13-8440-4123-9F66-85589234C2)
6 B3/Addressing_Need_-_Purpose_-_Alternatives_under_the_CEEA.pdf

7 The OPS defines need for a project as the
8 problem or opportunity the project is intending to
9 solve or satisfy. In contrast, the purpose of a
10 project is what is to be achieved by carrying out
11 that project. The OPS states that the need for and
12 purpose of a project should be established from the
13 perspective of the project proponent and that
14 provides the context for consideration of
15 alternatives to the scoped project. Similarly,
16 alternatives to a project are to be considered in
17 relation to the project need and purpose and also
18 from the Proponent's perspective.

19

20 **Need for and Purpose of the Project**

21 In terms of the need for the Project, Shell
22 has made considerable investments in obtaining its
23 lease holdings in the Athabasca Region and defining
24 its resources. The leases for the Project contain
25 approximately two billion barrels of recoverable

1 bitumen. ²⁸ Transcript Vol. 3, pg. 316 Shell has
2 responsibility to its shareholder and project
3 partners to develop these lease holdings in
4 economically efficient ways in order to realize
5 value from its investments. In addition, Shell has
6 a legal obligation to the people of Alberta, who
7 own the resource, to develop it in a timely and
8 efficient manner. ²⁹ Transcript Volume 3, pg. 230

9 The Project is an expansion of an existing
10 mine and will take advantage of existing facilities
11 and infrastructure. The Project will also allow
12 development of the existing Jackpine Mine Phase I
13 to be optimized through integration with the
14 expansion. ³⁰ Transcript Vol. 3, pg. 231

15 More generally, the Project will provide
16 benefits to the people of Alberta and the rest of
17 the country. Developing this Project will cost
18 approximately eight to twelve billion dollars.

19 ³¹ Transcript Vol. 3, pg. 310 That investment will result
20 in increased employment, income, business revenue,
21 and government revenue. The Alberta economy is
22 expected to receive 50 percent of the total
23 construction expenditures for the Project amounting
24 to between four and six billion dollars. Of this,
25 between 265 and 400 million dollars will accrue to

1 regional companies and workers. During Project
2 operations, annual expenditures will be in the
3 hundreds of millions of dollars, 40 percent of
4 which will be spent on regional companies and
5 workers and 75 percent of which will be spent in
6 the province of Alberta. ^{32 Transcript Vol. 3, pg. 302}

7 Outside of Alberta, businesses and workers in
8 the rest of Canada are expected to receive between
9 two and three billion dollars in project
10 construction expenditures, and almost 10 percent of
11 annual operating expenditures. ^{33 Transcript Vol. 3, pg. 303}

12 For the Federal and Provincial Governments,
13 the Project is estimated to generate \$17 billion in
14 royalties and taxes over its life. This is over
15 and above the taxes and royalties already
16 associated with the Muskeg River Mine and the
17 Jackpine Mine Phase I. ^{34 Transcript Vol. 3, pg. 302}

18 The Project will also add to the Regional
19 Municipality tax assessment base and at current
20 rates will pay between 23 and 34 million dollars
21 annually in property taxes. ^{35 Transcript Vol. 3, pg. 301}

22 In terms of employment, the Project is
23 estimated to generate 9,310 work years of onsite
24 employment. There will also be 3,100 work years of
25 off-site employment in Alberta. ^{36 Transcript Vol. 3,}

1 pg. 300 At peak, the construction force will be
2 4,400 people. The Project will also create 750
3 full-time jobs during operations. ³⁷ Transcript Vol. 3,
4 pg. 300

5 Many of these benefits will accrue
6 specifically to local Aboriginal communities. For
7 example, Shell has spent more than \$1 billion on
8 Aboriginal contractors and businesses in the
9 Athabasca Region in the last six years. ³⁸ Transcript
10 Vol. 3, pg. 301

11 Finally, this Project will enhance Canada's
12 security of energy supply. Shell's expectation is
13 that global energy demand will double by 2050 from
14 2000 levels. ³⁹ Transcript Vol. 3, pg. 245 To meet this
15 growing demand, the world will require all types of
16 energies, including biofuels, wind, nuclear, and
17 fossil fuels. ⁴⁰ Transcript Vol. 3, pg. 245 The oil sands
18 are an important part of this global energy mix and
19 will be used to meet Canada's domestic energy needs
20 as well as the needs of our export markets.

21 ⁴¹ Transcript Vol. 3, pg. 246 This Project, together with
22 other oil sands development, will enhance Canada's
23 role as an emerging energy superpower.

24 In summary, Mr. Chairman, this Project is
25 needed to satisfy Shell's obligations to both its

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

11

12 **Alternatives to the Project**

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. ⁴² CEAA Operational Policy Statement: Addressing "Need
22 for", "Purpose of", "Alternatives to" and "Alternative Means" under the
23 *Canadian Environmental Assessment Act*. Available online:
24 <<http://www.ceaa-acee.gc.ca/Content/5/C/0/5C072E13-8440-4123-9F66-85589234C2>
25 B3/Addressing_Need_-_Purpose_-_Alternatives_under_the_CEAA.pdf> at 3

1 Shell has investigated alternatives to
2 developing the Jackpine Mine Expansion resources
3 and has concluded that the Development Plan
4 described in this Application represents the most
5 practical, economical, and sustainable means of
6 extracting this resource. Currently, given the
7 local geology, there are no viable or realistic
8 alternatives to this Project such as in-situ
9 extraction, because the resource is too close to
10 the surface and mining is the only viable method of
11 extracting the bitumen.

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

18 43 Transcript Vol. 3, pg. 231

19

20 **Alternatives Means of Carrying out the Project**

21 Since there were no viable alternatives to
22 the Project identified by Shell, Shell focused its
23 assessment on alternative means of carrying out the
24 Project, meaning the different types and placement
25 of facilities within the overall oil sands mining

1 scheme. ⁴⁴ Transcript Vol. 7, pg. 1458 One of the primary
2 alternative assessments that was carried out was
3 related to mining around the Muskeg River. In the
4 2007 EIA, Shell presented three options:

5 - Leave the river in place by only mining up
6 to it;

7 - Divert the river through a pipeline; or

8 - Divert the upper sections of the river

9 into Kearl Lake. ⁴⁵ Exhibit 001-001A, Adobe 375 The
10 pipeline diversion option was selected as the
11 preferred alternative among those three at the
12 time.

13 Through ongoing engagement with local
14 stakeholders and Aboriginal groups, it became clear
15 that diverting the Muskeg River through a pipeline
16 was considered unacceptable by most local
17 communities. Concerns were raised by several
18 Aboriginal groups that diverting the Muskeg River
19 through a pipeline would negatively impact the
20 spirit of the river and also navigability.

21 Concerns were also raised about water quality in
22 the river, particularly as a result of Shell's
23 original plan to flow the Muskeg River through end
24 pit lakes containing mature fine tailings

25 post-closure. ⁴⁶ Transcript Vol. 3, pg. 241

1 As a result of those discussions, Shell
2 reconsidered its options and it eventually put
3 forward the Muskeg River Diversion Alternative.
4 This alternative involves several modifications to
5 the Project at substantial cost, including
6 centrifugation of all mature fine tailings at the
7 end of mine life to eliminate tailings from the end
8 pit lakes which flow into the Muskeg River, and
9 construction of an open diversion channel instead
10 of a pipeline, including the sterilization of
11 approximately 27 million barrels of bitumen.

12 ^{47 Exhibit 001-015A, Adobe 9-16; Transcript Vol. 6, pg. 1151} While
13 that represents a significant cost to Alberta in
14 lost resource, it represents a reasonable balance
15 of economic, social and environmental issues, in
16 Shell's view.

17 In terms of social impacts, the evidence
18 suggests that the upper reaches of the river that
19 flow through the Project lease have a low use by
20 Aboriginal groups. Therefore, Shell focused on
21 protecting the lower reaches of the river that were
22 considered part of the Aboriginal fishery.

23 ^{48 Transcript Vol. 8, pgs. 1557-1558} At the same time, the
24 Muskeg River Diversion Alternative allows for
25 continued access by watercraft along the river, and

1 addresses some of the issues around losing the
2 spirit of the river. In particular, Shell's
3 closest Aboriginal neighbour, Fort McKay, has not
4 objected to the proposal.

5 In terms of environmental issues, Shell's
6 analysis demonstrated that the diversion would
7 result in negligible to low effects on water
8 quality, aquatic health and fish habitat in the
9 Muskeg River. ^{49 Exhibit 001-051G, Adobe 111, 128 and 129} To the
10 extent fish habitat will be lost in the diversion,
11 that habitat will be compensated for through
12 Shell's No Net Loss Plan. Therefore, the
13 assessment of the Muskeg River Diversion
14 Alternative resulted in the same overall conclusion
15 as the original EIA that there are no likely
16 significant adverse effects on the Muskeg River due
17 to the Project. ^{50 Transcript Vol. 8, pg. 1558}

18 Finally, in terms of economic issues, the
19 diversion will eliminate sterilization of the
20 bitumen resources on Shell's leases. ^{51 Transcript Vol. 3,}
21 pg. 448

22 In the EIA, Shell considered leaving the
23 Muskeg River in place and mining up to the south
24 side of the river. That option would sterilize
25 424 million barrels of bitumen. ^{52 Exhibit 001-001A,}

1 Adobe 375 Subsequent to submitting the EIA, Shell
2 considered the implications of mining within 200
3 metres on either side of the river. That scenario
4 introduced greater concerns about seepage losses
5 from the river due to mine pit dewatering.

6 53 Transcript Vol. 8, pg. 1560 It also would sterilize
7 172 million barrels of bitumen. 54 Exhibit 001-102 If
8 Shell were only able to mine the south side of the
9 river, revised estimates based on additional
10 drilling information has suggested that 412 million
11 barrels of bitumen would be sterilized.

12 55 Exhibit 001-102 In contrast, under the proposed
13 diversion, only about 27 million barrels of bitumen
14 will be sterilized. 56 Exhibit 001-015A, Adobe 16 Balancing
15 environmental, social and economic considerations,
16 Shell determined that the Diversion Alternative
17 represented the best option for managing the Muskeg
18 River.

19

20 **ENVIRONMENTAL ISSUES**

21 I would now like to address the key
22 environmental issues that were raised during the
23 hearing and in evidence, and I'll start with a
24 general discussion of assessment methodology. I'll
25 follow that with discussions of air quality,

1 greenhouse gases and climate change, water
2 management and water quality, fish and fish
3 habitat, human health, terrestrial issues including
4 wildlife, migratory birds and tailings ponds,
5 reclamation, wetlands and old-growth forest, and
6 finally cumulative effects.

7 I will then conclude this part of the
8 argument with a general discussion of uncertainty
9 in the assessment and responses to the Federal
10 Government's recommendations.

11

12 **Methodology**

13 At the outset, I would like to point out that
14 a substantial portion of the evidence filed by the
15 Athabasca Chipewyan First Nation and the Oil Sands
16 Environmental Coalition reflected differences in
17 Environmental Assessment methodology between those
18 parties and Shell. For example, ACFN's Integrated
19 Knowledge and Land Use Report used different study
20 areas than Shell to assess Project effects and
21 determine significance based on effects to the most
22 sensitive land users, not the collective ACFN
23 community. ⁵⁷ Transcript Vol. 10, pg. 2409

24 Similarly, many of the technical and expert
25 submissions from ACFN and OSEC contained critiques

1 of Shell's Assessment but failed to provide any
2 evidence to support a contrary position. In
3 Dr. Carver's own words: "I didn't do the research.
4 I'm looking at other people's research." ^{58 Transcript}
5 Vol. 10, pg. 2367

6 I will address the specific expert reports
7 later in my argument, Mr. Chairman, but it seems
8 clear that the primary debate is a difference of
9 opinion on assessment methodology. In that regard,
10 I'd suggest Shell took the correct approach.
11 Shell's EIA methodology was based on the Terms of
12 Reference for the Project, guidance from the CEAA
13 agency, methodologies recommended by the Cumulative
14 Effects Management Association, and standard
15 Environmental Assessment practices.

16 While some parties take issue with these
17 standard approaches, Shell's methodologies have
18 been widely accepted, are consistent with
19 regulatory guidance, and have been applied in
20 numerous project assessments throughout this
21 country. They have been tested through extensive
22 IRs over several years and as a result I submit
23 that Shell's EIA methodologies are reasonable and
24 appropriate in these circumstances.

25 Finally, I would also like to note that

1 several of the interveners' experts gave lengthy
2 presentations during the hearing summarizing their
3 written submissions, most of which critiqued
4 Shell's Assessment but failed to present any new
5 assessment of their own.

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

10

11 **Air Quality**

12 Let me turn to air quality. OSEC in
13 particular has focused on NO_x and SO₂ emissions from
14 the Project and has asserted that Shell has
15 forecast exceedances of air quality thresholds
16 established in the Lower Athabasca Regional Plan.

17 ^{59 Transcript Vol. 9, pg. 1771} However, the LARP is clear,
18 that for air emissions, modelling results are to be
19 used for regional planning purposes and not for
20 determining exceedances. ^{60 Exhibit 001-070A, Adobe 29}

21 In addition, there are no predicted exceedances of
22 the LARP triggers due to the Project. Shell's EIA
23 concluded that for the Application Case, the
24 Project will actually reduce SO₂ emissions by
25 0.1 percent and NO_x emissions by 0.2 percent.

1 As a result of changes to approved emissions
2 from the Jackpine Mine Phase I, SO₂ and NO_x
3 emissions from the Project will constitute less
4 than 1.0 percent of the region in total, in part
5 because the Project does not include an upgrader.
6 ^{61 Transcript Vol. 3, pg. 251, Exhibit 001-051I, Adobe 31} As a result,
7 the EIA concluded that these emissions from the
8 Project would have a negligible to low effect.

9 Environment Canada's Mr. Fox suggested that
10 air emissions from the Project's mine fleet may
11 have been underestimated without providing any
12 analysis to support that view. ^{62 Transcript Vol. 13,}
13 ^{pg. 3273} However, Shell's evidence is that the
14 assessment was both reasonable and conservative;
15 Shell assessed their mine-fleet emissions based on
16 the maximum year of emissions over the life of the
17 Project. ^{63 Exhibit 001-001F, Adobe 512} For regional mine
18 fleets, the model assessed the maximum emissions
19 from each project and assumed that their emissions
20 were occurring simultaneously. ^{64 Exhibit 001-001B, Adobe 158}
21 As shown in Figure 3.2-1 of Appendix 3.2 of Shell's
22 May 2012 Submission, this approach results in a
23 conservative assessment of regional mine-fleet
24 emissions. ^{65 Exhibit 001-051I, Adobe 13} The air quality
25 model validation conducted for the EIA concluded

1 that NO₂ predictions near the mine sites were
2 overpredicted by a factor of two to three times.
3 ^{66 Exhibit 001-001F, Adobe 102} In addition, Shell's
4 witnesses explained during the hearing that it has
5 been recognized that NO₂ modelling in the region is
6 overly conservative and that work is currently
7 underway by CEMA to refine those models to reduce
8 some of this over-conservatism. ^{67 Transcript Vol. 8,}
9 ^{pg. 1575} As a result, Shell submits that its
10 assessment of mine-fleet emissions was both
11 reasonable and conservative.

12 Shell recognizes, however, that maintaining
13 air quality in the Oil Sands Region is of critical
14 importance. And, as a result, Shell has committed
15 to several operational standards as part of its
16 project, including:

17 (a) committing to purchasing TIER-IV trucks
18 for the project fleet as soon as they are
19 available;

20 (b) monitoring truck idling with the goal of
21 minimizing emissions;

22 (c) implementing pit-stop practices to
23 minimize idling during shift changes;

24 (d) using condition-based monitoring and
25 maintenance rather than time-based maintenance to

1 ensure optimal fleet performance; and

2 (e) ensuring that the cogeneration units and
3 boilers used for the Project meet the best
4 regulatory standards available. ⁶⁸ Exhibit 001-001B,

5 Adobe 154-155; Exhibit 001-070A, Adobe 21; Transcript Volume 3, pg. 252

6 Mr. Roberts explained during the hearing that
7 Shell is also working with equipment suppliers to
8 improve air emissions from new purchases. Shell is
9 the first oil sands operator actively considering
10 hybrid diesel shovels, and it is actively
11 investigating alternative fuels to diesel.

12 ⁶⁹ Transcript Vol. 5, pgs. 834-835 Shell is also an active
13 participant in ongoing management initiatives in
14 the Oil Sands Region focused on regional air
15 quality. These initiatives include monitoring
16 through the Wood Buffalo Environmental
17 Association's Terrestrial Environmental Effects
18 Monitoring Program. ⁷⁰ Transcript Vol. 3, pgs. 252-253,

19 Exhibit 001-001B, Adobe 155 Shell is managing potential
20 emissions from its projects and is working with all
21 of its stakeholders to address this regional issue.

22 A related issue is acid deposition.

23 Dr. Schindler's critique suggested the EIA findings
24 associated with acid deposition are that "23 lakes
25 in the area already suffer from deposition of

1 acidifying sulphur and nitrogen compounds that
2 exceed their critical loads." ^{71 Exhibit 017-016C, Adobe 1-17}
3 This statement is false. First, the EIA shows that
4 18 lakes are naturally below a pH of 6 in
5 Pre-industrial conditions, three additional lakes
6 were predicted to exceed critical loads in the Base
7 Case, and two will exceed those loads in the
8 Planned Development Case. ^{72 Exhibit 001-051I, Adobe pg. 131}

9 The assessment conducted by Shell was conservative
10 and was consistent with regional guidance. And it
11 predicted that there will be negligible
12 acidification effects from the Project on soil,
13 vegetation and water receptors, and that none of
14 the 414 model lakes will become acidified due to
15 this Project. ^{73 Exhibit 001-001B, Adobe 157; Exhibit 001-001F,}

16 Adobe 1412; Exhibit 017-035, Adobe 20

17 Second, a predicted
18 exceedance of a critical load does not mean lakes
19 are suffering, but rather, that monitoring should
20 be conducted on that lake as a precautionary
21 measure. ^{74 Transcript Vol. 15, pg. 3725}

22 Dr. Schindler's critique also quoted from
23 selected articles in a 2010 special issue of the
24 *Journal of Limnology*, but he ignored several key
25 findings in that issue. Those findings were
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." ^{75 Transcript}

12 Vol. 15, pg. 3730

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 76 Exhibit 017-016BB, Adobe 1; Exhibit 017-016I, Adobe 48; Exhibit 017-016O,

21 Adobe 182; Exhibit 017-016E, Adobe 233; Transcript Vol. 15, pg. 3726

22 Furthermore, Shell has designed the Project
23 to minimize acid-forming emissions and continues to
24 provide a leadership role in regional initiatives
25 addressing the issue. Shell supports CEMA's

1 Regional Acid Deposition Management Framework
2 designed by CEMA to prevent any damage from acid
3 deposition. Shell was directed by the Terms of
4 Reference to conduct the EIA in accordance with
5 this framework and Shell has committed to comply
6 with it. ⁷⁷ Transcript Volume 3, pg. 252, Exhibit 001-001B, Adobe 155

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

13 CALPUFF model runs in 2010 by CEMA's Air
14 Working Group suggests that the region is currently
15 well below the framework's management criteria.

16 ⁷⁸ Exhibit 001-070A, Adobe 40 This is also reflected in
17 WBEA's Annual Report which shows very little change
18 in the NO₂ levels in the region since 1998 and
19 shows all stations well under the LARP thresholds.

20 ⁷⁹ Transcript Vol. 7, pg. 1275; Transcript Vol. 8, pg. 1574;

21 ^{Exhibit 017-016G, Adobe 217} In fact, measured
22 concentrations at some stations have been
23 decreasing. Similarly, community receptors for SO₂
24 emissions are well below the LARP thresholds and
25 emissions have been declining due to installation

1 of flue-gas scrubbing at Suncor and Syncrude.

2 80 Transcript Vol. 8, pg. 1578

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

6

7 **Greenhouse Gases and Climate Change**

8 So let me turn to greenhouse gases and
9 climate change. Another issue that OSEC has raised
10 in this proceeding relates to that issue. And,
11 Mr. Chairman, as we heard through the course of the
12 three weeks, it's a global issue. And Mr. Huat
13 from OSEC confirmed that in his testimony.

14 81 Transcript Vol. 9, pg. 1833 Shell is a leader in the oil
15 sands industry and is committed to using
16 commercially viable technologies, operating
17 practices, training and continuous improvement to
18 reduce greenhouse gas emissions from the Project
19 towards an aspiration goal of eventually reducing
20 greenhouse gas emissions from the oil sands to the
21 same level as the equivalent basket of imported
22 crude into North America. 82 Transcript Vol. 5, pg. 949

23 Mr. Huat agreed that Shell's existing oil sands
24 projects were on the leading edge of Oil Sands
25 Projects in terms of minimizing greenhouse gas

1 emissions. ⁸³ Transcript Vol. 9, pg. 1880

2 Since greenhouse gas emissions and climate
3 change are global issues, the Project's greenhouse
4 gas emissions must be considered in that context.
5 Based on the information provided in Environment
6 Canada's latest Greenhouse Gas Emissions Trend
7 Report, Shell has estimated that this Project's
8 emissions will represent approximately 0.5 percent
9 of Alberta's emissions and 0.2 percent of Canada's
10 emissions. ⁸⁴ Exhibit 017-016D, Adobe 44 From a global
11 perspective, the Project's emissions will represent
12 0.004 percent. ⁸⁵ Exhibit 017-016D, Adobe 13 In this
13 context, the Project's greenhouse gas emissions are
14 clearly insignificant.

15 A similar conclusion was reached by the Royal
16 Society of Canada's expert panel who concluded that
17 oil sands emissions account for less than
18 0.1 percent of global greenhouse gas emissions and
19 that completely shutting down the oil sands
20 industry would have a minimal impact on global
21 greenhouse gas emissions. ⁸⁶ Exhibit 001-092, Adobe 5

22 That doesn't mean it's business as usual for
23 Shell. Shell has recently announced its intention
24 to proceed with its Quest carbon capture and
25 storage project which will capture more than one

1 million tonnes of carbon dioxide per year.

2 ^{87 Transcript Vol. 3, pg. 253} Specific initiatives that
3 Shell has committed to for this Project to reduce
4 greenhouse gases include:

5 - Designing facilities to be CO₂ capture
6 ready where practical and economically achievable;

7 - Optimizing and continuously improving
8 energy efficiency in the design and operation of
9 processing facilities; and

10 - Applying best practices to minimize
11 fuel use for haul vehicles including regular
12 maintenance and computerized mine-fleet dispatch.

13 ^{88 Exhibit 001-001B, Adobe 251, 252; Transcript Vol. 3, pg. 253}

14 Shell will also comply with the requirements
15 of Alberta's Specified Gas Emitters Regulation, and
16 any future Federal regulatory requirements when
17 they are put in place. ^{89 Transcript Vol. 3, pg. 255} The

18 Federal Government testified that it has already
19 made significant progress on reducing greenhouse
20 gas emissions in the country and further
21 regulations are being developed. ^{90 Transcript Vol. 13,}

22 pgs. 3163-3164 The Panel should take comfort that the
23 government is continuing to address this issue and
24 that Shell is committed to being a part of the
25 solution to this global challenge.

1 In terms of climate change, Environment
2 Canada and ACFN have both expressed concerns with
3 Shell's methodology for predicting the future
4 effects of climate change and how those effects
5 will interact with the effects of the Project.
6 ^{91 Exhibit 005-020, Adobe 79-82; Exhibit 006-13QQ, Adobe 442; Exhibit}
7 ^{006-022, Adobe 81 and 95} In particular, these parties have
8 suggested that Shell did not use the most
9 up-to-date data for climate change modelling in the
10 EIA. While Shell recognizes that climate change is
11 real and is likely to influence future operations
12 and environmental impacts, it also recognizes that
13 there is a lack of consensus around the approaches
14 to predicting and managing climate change. This is
15 evident in the lack of alignment in the review
16 documents provided by various interveners, and
17 multiple approaches compiled in the literature
18 review that Shell completed as part of their
19 climate change analysis. ^{92 Exhibit 001-001F, Adobe 134-142}
20 Dr. Bonsal for Environment Canada agreed that there
21 is considerable uncertainty among the different
22 models. ^{93 Transcript Vol. 14, pg. 3523} Dr. Carver for ACFN
23 also agreed with Shell's conclusion on
24 uncertainties associated with global climate model
25 outputs. ^{94 Exhibit 006-028} Hence, there is no single

1 approach to this issue that would satisfy all
2 reviewers in the area. In the absence of a
3 standardized approach, Shell has produced a
4 reasonable and defensible set of predictions that
5 were used to assess the uncertainty associated with
6 climate change effects on environmental impact
7 predictions and has outlined the resulting
8 uncertainty on each component of the EIA. ⁹⁵ Exhibit
9 001-001F, Adobe 90 and 181-182; Exhibit 001-001C, Adobe 422-424

10 Shell's evidence is that the EIA used the
11 most up-to-date climate-change model inputs at the
12 time the assessment was completed and that its
13 climate scenarios remain realistic. ⁹⁶ Exhibit 001-070A,
14 Adobe ⁵² Shell's methodology is consistent with the
15 methods used by others to assess the uncertainty of
16 climate change on stream flows. ⁹⁷ Exhibit 017-016H, Adobe
17 157 to 180; Exhibit 001-96; Exhibit 001-097 Shell also provided
18 additional evidence that the approached suggested
19 by ACFN will yield similar results to the results
20 used by Shell in the EIA. ⁹⁸ Exhibit 001-070R Dr. Biftu
21 for Shell explained during the hearing that based
22 on ongoing work he has been doing, even if updated
23 data were used in the assessment, the
24 conclusions would not have changed. ⁹⁹ Transcript Vol. 4,
25 pg. ⁵⁷⁰ While Shell has predicted long-term

1 decreases in river flows in the Athabasca River,
2 other more recent assessments have suggested that
3 flows may actually increase through higher levels
4 of precipitation in the future. ^{100 Exhibit 001-070A,}

5 ^{Adobe 53} For example, the Royal Society of Canada's
6 expert panel concluded last month that "Increased
7 precipitation will be expected to cause increased
8 flow rates in the Athabasca River." ^{101 Exhibit 001-092,}

9 ^{Adobe 15}

10 As a result, Shell's methodology for climate
11 change was conservative. If river flows actually
12 increase over time as a result of climate change or
13 decrease less than Shell's EIA predicted, the
14 cumulative effects in the region will be less than
15 has been assessed in the EIA.

16 In addition, Shell has demonstrated in its
17 evidence that it has the ability to adaptively
18 manage if climate change effects turn out to be
19 materially different than what Shell has predicted.
20 These issues would also be addressed through the
21 Phase 2 Framework for the Athabasca River, as well
22 as through other means such as water storage.

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

1

2 Water Management and Water Quality**3 Water Management**

4 Mr. Chairman, let me turn to the issue of
5 water management, and in particular water
6 withdrawals from the Athabasca River.

7 ACFN has raised concerns regarding potential
8 effects due to water withdrawal from the Athabasca
9 River, particularly during low-flow periods.

10 ¹⁰² Exhibit 006-013B, Adobe 12; Exhibit 006-013QQ, Adobe 443-453;

11 ^{Exhibit 006-022} They have suggested that at present
12 there are times when the flows in the Athabasca are
13 too low to support the exercise of ACFN Treaty
14 Rights. ¹⁰³ Exhibit 006-013B, Adobe 12

15 The Project will require additional water
16 withdrawals from the river. However, Shell has
17 planned this Project to reduce the amount of water
18 withdrawal from the river as much as possible
19 through capturing groundwater and surface water
20 runoff for use in the extraction process. Shell's
21 current plans for the Project include 30 days of
22 water storage onsite, although Shell will be able
23 to draw from additional sources of water onsite in
24 the event of prolonged periods of low flow on the
25 river. ¹⁰⁴ Transcript Vol. 5, pg. 856; Transcript Vol. 7. Pgs. 1309-1310

1 In addition, Shell has committed to complying
2 with the Water Management Framework for the Lower
3 Athabasca River to ensure that water withdrawals
4 from the Athabasca are reduced as necessary during
5 low-flow conditions. Shell actively participated
6 in development of the original framework and the
7 currently recommended Phase 2 Framework. ^{105 Transcript,}
8 Vol. 3, pg. 256, 257, Exhibit 001-001A, Adobe 523 Through that
9 process, Shell has committed to reduce water
10 withdrawals to 0.2 cubic metres per second whenever
11 the total flows in the river reach 87 cubic metres
12 per second or less. ^{106 Transcript Vol. 7, pgs. 1306-1307} The
13 Phase 2 Framework will also require Shell to
14 construct additional onsite storage. ^{107 Transcript}
15 Vol. 5, pg. 856

16 In the context of total river flows, the
17 amount of water that Shell is proposing to withdraw
18 is less than 0.1 percent of the mean annual flow,
19 and ranging from 0.04 percent of average flows in
20 the summer to 0.3 percent average flows in the
21 winter. ^{108 Exhibit 001-051F Adobe page 61; Transcript Vol. 3, pg. 256}

22 To put that in context, the predicted change in the
23 Athabasca River water level is less than
24 1 millimetre, a change that would have no
25 discernible effect on the Athabasca River or the

1 Peace-Athabasca Delta. ¹⁰⁹ Exhibit 001-051F, Adobe 62-63; Exhibit
2 001-051K, Adobe 23; Exhibit 001-070A, Adobe 45

3 ACFN's concerns are primarily regarding
4 cumulative effects on flow in the Athabasca River
5 and the Peace-Athabasca Delta. Mr. Makowecki for
6 DFO testified during the hearing that these issues
7 are cumulative issues and are not specific to any
8 one project. ¹¹⁰ Transcript Vol. 13, pg. 3210 The cumulative
9 effects on the Peace-Athabasca Delta are influenced
10 primarily by historic changes in flow of the Peace
11 River caused by the Bennett Dam. ¹¹¹ Exhibit 006-013H,
12 Adobe 323-326 Total allocation of the Athabasca River
13 is about 3.5 percent of total annual average river
14 flows with allocations for oil sands mining
15 projects accounting for 2.2 percent of the total
16 flow, and actual water usage of about 0.7 percent
17 of the annual average river flows. ¹¹² Exhibit 001-070EE,
18 Adobe ¹³⁹ Nonetheless, ACFN and OSEC expressed
19 concerns that the current Water Management
20 Framework and the Phase 2 Framework recommendation
21 do not adequately consider Ecological Base Flow,
22 EBF, or Aboriginal Base Flow, which are the flows
23 required for ongoing navigation within the
24 Athabasca River using traditional and current
25 means. ¹¹³ Transcript Vol. 9, pgs. 1764-1769; Transcript Vol. 10,

1 pg. 2117 Mr. Makowecki for DFO explained that the
2 development of the Phase 2 Framework recommendation
3 did consider both the development of an Ecological
4 Base Flow and navigability. 114 Transcript Vol. 13, pg. 3225;
5 Transcript Vol. 14, pg. 3463 Ms. Vollema from Transport
6 Canada also testified that the Athabasca River was
7 historically dredged and that the river is now
8 returning to its pre-1940 levels. 115 Transcript Vol. 14,
9 pg. 3681 This likely explains the increased
10 occurrence of sandbars in the river that ACFN
11 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. 116 Exhibit 001-001C,
17 starting at Adobe 417; Exhibit 001-051F, Adobe 62-63; Exhibit 001-051G,
18 Adobe 94-95 Shell also conducted a supplemental
19 assessment to look specifically at cumulative
20 effects on the Peace-Athabasca Delta. 117 Exhibit
21 001-051K These assessments were completed based on
22 the current Water Management Framework. Using this
23 framework, the results of the assessment indicated
24 that the predicted changes in water level for the
25 Athabasca River through the Planned Development

1 Case will be very small; less than 5 centimetres.

2 118 Exhibit 001-070A, Adobe 45 If the recommended Phase 2
3 Framework comes into effect, there will be further
4 restrictions on water withdrawal from the Athabasca
5 River which would further reduce these cumulative
6 effects.

7 Mr. Chairman, this assessment demonstrates
8 that the cumulative effects of the Project,
9 together with other existing and planned
10 developments on surface water hydrology in the
11 Athabasca River and the Peace-Athabasca Delta are
12 not significant. Transport Canada similarly
13 concluded that significant adverse effects to
14 navigation are not anticipated from the Project.

15 119 Exhibit 005-020, Adobe 133 Furthermore, these are issues
16 that industry, stakeholders and regulators have
17 been actively involved in managing, and the Water
18 Management Framework is designed to ensure that
19 cumulative water withdrawals by oil sands projects
20 from the Athabasca River do not significantly alter
21 the health of the river or the use of it. 120 Exhibit

22 001-070L, Adobe 19, 22 and 29; Transcript Vol. 3, pg. 257 These
23 efforts are ongoing, and have culminated in the
24 recently recommended Phase 2 Framework which Shell
25 has supported.

1 With respect to the Muskeg River, questions
2 arose regarding the status of the Muskeg River
3 Interim Framework for water quantity and quality
4 which was developed in 2008 to manage the quality
5 and quantity of the Muskeg River watershed.

6 ^{121 Exhibit 017-023, Adobe 17} A comprehensive framework to
7 replace the Interim Framework has not yet been put
8 forth by ESRD given the status of the development
9 in the watershed. But Shell has worked with ESRD
10 on making the Interim Framework operational and
11 Shell is committed to working with ESRD to develop
12 the comprehensive framework. ^{122 Exhibit 001-070A, Adobe 20}

13 In addition, Shell has conducted a rigorous
14 assessment of effects of the Project on the lower
15 productive reaches of the Muskeg River and has
16 concluded that the integrity of the Muskeg River
17 will be maintained. ^{123 Transcript Vol. 3, pg. 258-259}

18 Mr. Makowecki for DFO agreed that the Muskeg River
19 will remain productive if this Project is approved
20 and that a comprehensive framework is not required
21 before the Project can proceed. ^{124 Transcript Vol. 14,}

22 ^{pgs. 3665-3666} Therefore, while Shell is committed to
23 working with regulators to finalize a comprehensive
24 framework for the Muskeg River, this Project will
25 not compromise the integrity of the river and can

1 be approved in the absence of that final framework.

2 A final issue related to water management is
3 overburden dewatering and aquifer depressurization.

4 In order to safely mine the Project area, the
5 mine must first be dewatered. Overburden
6 dewatering will be accomplished through a
7 combination of shallow wells and ditching. If the
8 quality is suitable, this water will be discharged
9 to the environment, otherwise it will be retained
10 for use as process water. ¹²⁵ Exhibit 001-001A, Adobe 167 and

11 ²⁹⁵ Basal groundwater will, similarly, be removed
12 through depressurization wells which will be
13 progressively drilled as the mine advances. Basal
14 water from the depressurization wells will be used
15 as process water thus reducing the need for
16 withdrawals from the Athabasca River. ¹²⁶ Exhibit
17 001-001A, Adobe 297 and 301; Exhibit 001-006B, Adobe 172

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

1 receptors, such as reduced Base Flow to the Muskeg
2 River. While the EIA concluded that there would be
3 reduced groundwater discharge into the Muskeg River
4 as a result of dewatering, the residual impacts
5 from the Project on the Muskeg River were
6 determined to be negligible. ^{127 Exhibit 001-001C, Adobe 220;}
7 ^{Exhibit 001-051G, Adobe 111, 128 and 129} The effects of
8 temporary drawdown on the PCA were specifically
9 assessed in the EIA and the EIA concluded that the
10 PCA water levels will reestablish following
11 completion of dewatering activities. ^{128 Exhibit 001-001C,}
12 ^{Adobe 206} Finally, with respect to seepage of
13 produced water into the aquifer, the PCA and all
14 other groundwater sources were considered in terms
15 of project effects on water quality. And I'll
16 discuss this issue specifically in a few moments.
17 As a result, impacts on the PCA were included in
18 the EIA, and no significant impacts were predicted.
19 Shell will continue its efforts to refine its
20 understanding of the PCA, working cooperatively
21 with both Syncrude and Imperial Oil to ensure
22 proposed mitigation measures for the PCA remain
23 appropriate. ^{129 Transcript Vol. 6, pg. 1203}

24

25

1 **Water Quality**

2 The next issue I'd like to discuss is water
3 quality.

4 OSEC and ACFN have both raised concerns about
5 water quality, and this was also the subject of
6 critiques filed by Dr. Schindler on behalf of OSEC
7 and Dr. Carver on behalf of the ACFN.

8 These parties have expressed concerns about
9 the level of mercury, PAHs, and other compounds in
10 the Muskeg River watershed that result from air
11 emissions and water emissions from oil sands
12 development in the region. ^{130 Exhibit 017-016C, Adobe 14;}

13 Exhibit 017-016D, Adobe 1

14 I addressed the issue of air emissions
15 earlier and again the evidence clearly shows that
16 the Project's air emissions will not result in any
17 measurable change to water quality in the region.
18 Dr. Schindler in particular seems unaware that this
19 Project and Shell's oil sands mines generally have
20 no upgraders. In terms of water emissions, Shell
21 is committed to capture runoff and groundwater that
22 comes into contact with the Project area and to
23 reuse it. Shell will also divert streams around
24 the Project area to reduce the potential for
25 project effects. ^{131 Transcript Vol. 3, pg. 258} Shell is

1 committed to maintaining water quality in the
2 Muskeg River in compliance with the Interim
3 Management Framework for the Muskeg River and the
4 comprehensive framework once it is developed.
5 ^{132 Exhibit 001-070A, Adobe 20; Transcript Vol. 3, pg. 257} Shell will
6 also comply with the cumulative water quality
7 limits for the Athabasca River under LARP. ^{133 Exhibit}
8 ^{001-070A, Adobe 57}

9 To address seepage from its external tailings
10 disposal areas, Shell has proposed mitigation
11 measures that have already been applied
12 successfully at its existing oil sands mines,
13 including internal drains to relieve pressure in
14 the pond, collecting water from these drains in a
15 perimeter ditch, and recycling that water back into
16 the process.

17 Shell will also use collection wells around
18 the perimeter of the tailings pond to collect
19 seepage that would otherwise flow into surface
20 aquifers. Again, water will be captured and
21 returned back to the process for reuse. ^{134 Transcript}
22 ^{Vol. 3, pg. 259, 260}

23 Groundwater monitoring will be in place prior
24 to operation of the Project to establish baseline
25 conditions and will allow of informed mitigation

1 for any seepage that may occur. It is important to
2 note that seepage moves very slowly underground.
3 This allows for ample opportunity to detect losses
4 and formulate mitigation plans to effectively
5 control that seepage. Given the mitigation that
6 Shell has successfully used at its other oil sands
7 mines, and its ability to adaptively manage, Shell
8 has demonstrated that it can adequately control any
9 seepage that may occur from its tailings ponds.

10 135 Transcript Vol. 3, pg. 260

11 Finally, post-closure, Shell has designed the
12 closure landscape to preferentially drain toward
13 construction wetlands and pit lakes which will
14 provide active, or passive water treatment, I
15 should say, to ensure water quality in local
16 streams is consistently protected. Shell will
17 closely monitor the performance of these treatment
18 facilities and no water will be released into the
19 environment until the water quality meets accepted
20 standards. 136 Transcript Vol. 7, pgs. 1330-1332 Shell's EIA
21 conservatively predicts water quality will be
22 acceptable within 15 years of mine closure.

23 As a result of these proposed mitigation
24 measures, the EIA predicted that the Project will
25 have negligible effects on water quality in the

1 Athabasca River and the Muskeg River, with no
2 significant effects on fish, fish health, or human
3 health. ¹³⁷ Transcript, Vol. 3, pg. 261 The models that were
4 used to reach these predictions were also used for
5 the Muskeg River Mine Expansion and have been
6 verified and provide a conservative estimate of
7 what the water quality will be. ¹³⁸ Exhibit 001-070A,
8 Adobe 30

9 In terms of cumulative effects on water
10 quality, Shell has presented evidence that existing
11 and approved projects are predicted to have low to
12 negligible effects on key water quality
13 constituents, including acute and chronic toxicity,
14 labile naphthenic acids, total dissolved solids,
15 and tainting potential in receiving watercourses
16 and waterbodies. Shell's evidence is that existing
17 and proposed mitigation measures will ensure that
18 acute and chronic toxicity and tainting potential
19 will be at levels appreciably lower than the
20 corresponding threshold values. ¹³⁹ Exhibit 001-001C,

21 Adobe 91-92 With respect to effects on the
22 Peace-Athabasca Delta, Shell's assessment concluded
23 that there would be negligible effects on the delta
24 with respect to flows, water levels, water quality,
25 sediment quality, and air quality. ¹⁴⁰ Exhibit 001-051K,

1 Adobe 23 The findings of independent studies, that
2 were published after the May 2012 Submission,
3 support these conclusions. 141 Exhibits 001-070V, 001-070P,
4 001-07000, 001-070NN

5 Shell's conclusions on water quality were
6 challenged by Dr. Schindler, particularly with
7 respect to mercury and PAHs. Dr. Schindler claims
8 that mercury concentrations in predatory fish of
9 the Athabasca River and delta have been elevated
10 for years, that recent studies show increased
11 mercury deposition in snow near oil sands
12 developments, and that a study by Harris et al. in
13 2007 shows that mercury when added to a lake is
14 detectible in fish within months. 142 Exhibit 017-016C,

15 Adobe 3 According to Dr. Schindler, this
16 demonstrates that oil sands operations are
17 aggravating an already serious problem. 143 Exhibit
18 017-016C, Adobe 3

19 But there are two main problems with
20 Dr. Schindler's critique:

21 First, Dr. Schindler ignored the recent
22 finding by Evans and Talbot that found clear
23 downward trends in mercury concentrations in fish
24 tissue in the region. 144 Exhibit 017-016I, Adobe pg. 33

25 Second, and perhaps most important,

1 Dr. Schindler failed to relay a key finding from
2 the 2007 Harris study he relied on. That finding
3 was that 99, 99 percent of the mercury that was
4 applied to the environment was retained by the
5 watershed and did not contribute to changes in fish
6 or water mercury concentrations. ¹⁴⁵ Exhibit 017-016BB,

7 Adobe pg. 14

8 A comparison of the findings from Harris et
9 al. study against Shell's Aerial Deposition Study
10 for the Project, indicates that Shell's modelling
11 assessment is highly conservative because that
12 assessment assumed that nearly all
13 aerially-deposited metals would reach the aquatic
14 receptors. ¹⁴⁶ Transcript Vol. 15, pg. 3742; Exhibit 001-051L, Adobe 15

15 Given that the Project will have nearly
16 negligible emissions of metals, and this has been
17 confirmed for Shell's existing projects in the
18 National Pollutant Release Inventory data that has
19 been reported by the government, this is an
20 important aspect of the conservatism in Shell's
21 assessment. ¹⁴⁷ Exhibit 001-015A, Adobe 77; Exhibit 001-109;

22 Transcript Vol. 14, pgs. 3616-3617

23 Dr. Schindler also took issue with the EIA
24 finding that regarding polycyclical aromatic
25 hydrocarbons, or PAHs, the EIA assessed potential

1 PAH effects through multiple pathways and analysis.
2 One pathway examined aerial deposition to waters,
3 which was conducted in 2012 specifically in
4 response to Dr. Schindler's 2009 and 2010 papers
5 with Kelly et al. ^{148 Exhibit 001-051L} This assessment
6 was ignored by Dr. Schindler. That's a surprising
7 omission considering Mr. Vandenberg has been
8 e-mailing Dr. Schindler over the past two years in
9 an effort to collaborate on this topic and share
10 the data. ^{149 Transcript Vol. 9, pg. 2560; Exhibit 017-016E, Adobe}
11 ^{pg. 227; Transcript Vol. 15, pgs. 3737-3738} Given
12 Dr. Schindler's emphasis on transparency and data
13 provision and sharing, ^{150 Exhibit 017-016C, Adobe 1} his
14 silence in this situation is somewhat surprising.

15 Another PAH pathway that Shell assessed was
16 deposition in the Lower Athabasca River and the
17 delta sediments through aqueous and aerial
18 pathways. In his critique on this topic,
19 Dr. Schindler relied on two studies, one by Kurek
20 et al, which is not publicly available, and the
21 other, Timoney and Lee, which has been strongly
22 criticized by the Royal Society of Canada's expert
23 panel. ^{151 Exhibit 001-092} Dr. Schindler ignored the
24 Hall et al. paper, described by Mr. Vandenberg,
25 which stated that:

1 "Thus, despite rapid growth
2 of oil sands development during the
3 past 25 years, the data reveal no
4 measurable increase in
5 concentration or proportion of
6 river-transported
7 bitumen-associated indicator PACs."

8

9 Another definition for PAHs. And:

10

11 "Results also reveal no
12 evidence that industrial activity
13 has contributed measurably to the
14 sedimentary concentration of PACs
15 supplied by long-range atmospheric
16 transport and deposition in the
17 vicinity of the PAD as was also
18 found for key metals of concern."

19

152 Exhibit 001-070V

20

21 In his testimony, Dr. Schindler dismissed the
22 Hall study and said that a yet-to-be-released
23 report based on federal monitoring trumps that
24 study.

25

While the recently released abstract for the

1 federal study confirms that aerial deposition does
2 occur in the region near the oil sands, witnesses
3 for the Federal Government characterized the
4 federal study as representing preliminary results
5 that have not yet been vetted,^{153 Transcript Vol. 13,}
6 pgs. 3181-3182 and they also confirmed that the Hall
7 study and the recently announced federal study are
8 not directly comparable.^{154 Transcript Vol. 14, pg. 3507}
9 The federal studies do not change the conclusions
10 by Hall et al. that natural sources comprise the
11 majority of PAHs being deposited in the delta and
12 that deposition has not increased in recent decades
13 despite an increase in oil sands development.
14^{155 Transcript Vol. 15, pg. 3740; Exhibit 001-070V, Adobe 14}

15 Finally, Dr. Schindler has repeatedly stated
16 that upgraders are the primary source of aerial
17 deposition of PAHs and mercury to snowpack. And
18 Shell supports continued efforts by the joint
19 Alberta-Canada Monitoring Program to verify whether
20 in fact this claim is accurate. However, Shell is
21 not applying for an upgrader as part of the
22 Jackpine Mine Expansion Project.

23
24 **End Pit Lakes**

25 A related issue that attracted considerable

1 attention during the hearings was end pit lakes,
2 and particularly, concern that there is a lack of
3 certainty that end pit lakes will effectively treat
4 process-affected waters that are directed towards
5 those lakes post-closure.

6 Shell's evidence demonstrates, I would
7 submit, that there is a high degree of confidence
8 around the effectiveness of its end pit lakes based
9 on the following:

10 - the basic fundamental principles of
11 hydrology, limnology, and water treatment, are all
12 standard practice;

13 - the conservative models that have been
14 used by Shell in its assessment;

15 - the findings from both CONRAD and CEMA
16 research on wetlands, experimental ponds and pit
17 lakes;

18 - experience with pit lakes and other
19 mining industries that demonstrate pit lakes can be
20 used successfully;

21 - the mitigation and contingency options
22 that are available in the event that the current
23 plans are unsuccessful; and

24 - the fact that considerable research
25 continues to be carried out and Shell will not be

1 completing its end pit lakes for several decades.
2 156 Transcript Vol. 3, pg. 428; Transcript Vol. 5, pgs. 771-774; Exhibit
3 001-070A, Adobe 33

4 Shell also filed a recent report from CEMA
5 that provides a range of adaptive management
6 options to address potential future risks
7 associated with end pit lakes. ^{157 Exhibit 001-070K} This
8 document provides guidance for mine planners on how
9 best to plan, design, monitor, assess and adapt end
10 pit lakes in the oil sands, and it outlines a
11 number of technical considerations and key
12 milestones that can be used to verify that each pit
13 lake is on a trajectory towards
14 self-sustainability.

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

21 While there is some uncertainty associated
22 with end pit lakes, the predominant uncertainty
23 relates to the rate of biodegradation of initial
24 constituents in the pit lake and the input from
25 placed tailings deposits. Therefore, the

1 uncertainty is essentially one of time, first how
2 long it will take for the pit lake water to retain
3 a quality such that the lake outflow can be
4 released to the natural watershed, and second, the
5 time for the lake to achieve a sustained state of
6 productivity from the growth of natural flora and
7 fauna in support of fish habitat. ^{158 Exhibit 001-070K,}
8 Adobe 203; Transcript Vol. 5, pgs. 768-775 Therefore, the main
9 question is when, not if, end pit lakes will work.
10 Shell has predicted that the end pit lakes will
11 contain acceptable water quality that is suitable
12 for discharge to the receiving environment in 2065,
13 16 years after mine closure, ^{159 Exhibit 001-051M, Adobe 85}
14 and will be capable of supporting fish and other
15 aquatic organisms within two to three decades after
16 that. ^{160 Transcript Vol. 5, pg. 775} Shell will be
17 responsible for all tailings and reclamation
18 liabilities associated with the operation of the
19 Project. ^{161 Exhibit 001-006B, Adobe 2} This future
20 obligation is guaranteed through the Province's
21 recently updated Mine Financial Security Program.
22 ^{162 Transcript Vol. 8, pgs. 1639-1640}
23 Dr. Miller on behalf of OSEC presented a
24 report specifically on the uncertainties associated
25 with end pit lakes. That report however was based

1 on a number of inaccuracies, including:

2 - a belief that Shell's end pit lakes
3 will contain mature fine tails and will be
4 meromictic;

5 - that Shell did not consider seepage
6 into the lakes from end pit and external tailings
7 disposal facilities; and

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

12 All of those beliefs were wrong.

13 And Shell explained these inaccuracies in its
14 October 15th Reply Submission. ^{163 Exhibit 001-070A,}

15 ^{Adobe 33-34} And Dr. Miller conceded many of those in
16 his testimony. ^{164 Transcript Vol. 8, pg. 1683}

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. ^{165 Exhibit}
20 ^{001-070A, Adobe 33; Transcript Vol. 8, pg. 1701} Dr. Miller

21 himself conceded that the oil sands are distinctly
22 different from the hard-rock mining operations that
23 he has experience with. ^{166 Transcript Vol. 8, pg. 1702}

24 Dr. Miller's testimony and evidence were to rely
25 from experience with hard-rock mining where acid

1 drainage and metal leaching are consequences of
2 concern. The oil sands tailings contaminants of
3 primary concern are organic molecules originating
4 in the bitumen that, when in solution in
5 process-affected water, biodegrade over time.

6 ^{167 Exhibit 001-070K, Adobe 195; Exhibit 017-021, Adobe 6} As a
7 result, the Panel should afford Dr. Miller's report
8 limited weight and should rely on the assessment
9 conducted by Shell's environmental consultant that
10 Dr. Miller characterized as "a very good analysis
11 of pit lake dynamics." ^{168 Transcript Vol. 8, pg. 1707}

12 Similarly, Dr. Schindler recommends no
13 further approvals of end pit lakes until monitoring
14 is put in place at several existing pit lakes in
15 order to confirm that end pit lakes are working.

16 ^{169 Transcript Vol. 11, pg. 2545} However, Shell is
17 participating in the Syncrude Base Mine Lake
18 Project which is presently gathering the data that
19 will be required to demonstrate the efficacy of end
20 pit lakes. ^{170 Exhibit 001-070A, Adobe 41; Transcript Vol. 5, pg. 764}

21 In addition, Dr. Schindler conceded that he hadn't
22 actually reviewed the data on end pit lakes from
23 Syncrude's research program. ^{172 Transcript Vol. 11, pg. 2556}

24 and 2560

25 OSEC also raised concerns that Shell has not

1 conducted detailed assessments of alternative water
2 treatment options in the event the end pit lakes do
3 not work as intended. However, Shell has put
4 forward a plan for end pit lakes that is based on
5 sound scientific and engineering principles, and
6 monitoring will be carried out to verify these
7 predictions and determine whether additional or
8 alternative treatment options may be required. The
9 CEMA guidance document shows that there are a
10 variety of adaptive management measures that can be
11 put in place if necessary. Shell has a high degree
12 of confidence in the overall functioning of end pit
13 lakes and there is considerable time available to
14 implement adaptive management in accordance with
15 the CEMA guidance if monitoring indicates that
16 alternative water treatment is necessary.

17 172 Transcript Vol. 5, pgs. 796-797; Transcript Vol. 7, pg. 1327

18

19 **Fish and Fish Habitat**

20 **Fish Habitat**

21 On the issue of effects on fish and fish
22 habitat, Shell has developed a No Net Loss Plan
23 which describes the options Shell plans to
24 implement to achieve the necessary compensation for
25 expected losses in habitat area due to the Project.

1 173 Exhibit 001-001C, Adobe 677 The No Net Loss Plan was
2 developed with consideration of the No Net Loss
3 guiding principle for fish habitat, pursuant to
4 seeking approval from Fisheries and Oceans Canada
5 for the Project under the **Fisheries Act**. Shell
6 considered eight different alternatives for fish
7 habitat compensation but ultimately chose the
8 construction of a compensation lake at the Big
9 Creek and Redclay Creek drainages on the west side
10 of the Athabasca River as the preferred option.

11 174 Exhibit 001-064B, Adobe 35-37 This option provides
12 flexibility in size of the lake, would not require
13 ore sterilization, and was determined to have the
14 least disturbance footprint per hectare of lake
15 created. 175 Exhibit 001-064B, Adobe 37 Its location will
16 also provide good fish passage, good outlet
17 maintenance flows, and natural fish colonization of
18 the lake. 176 Exhibit 001-064B, Adobe 38

19 Shell held meetings with Aboriginal groups to
20 provide information about Shell's proposed
21 compensation lake and to understand any concerns
22 they may have with it. 177 Exhibit 001-057, Adobe 59-60, 77 and
23 ¹¹⁹ Several groups, including ACFN, conducted
24 reviews of the No Net Loss Plan and submitted those
25 reviews to Shell. 178 Exhibit 001-057, Adobe 90-91 Shell

1 responded to each of those reviews and incorporated
2 the concerns into the updated Draft No Net Loss
3 Plan which was filed in September. ^{179 Exhibit 001-062,}
4 Adobe 9, 21 and 33; Exhibit 001-114

5 The Draft No Net Loss Plan has been designed
6 to provide new fish habitat that will cumulatively
7 have a level of productive capacity equal to or
8 greater than the habitats affected by the Project.
9 Overall, a net gain in the productive capacity of
10 available fish habitat is predicted as a result of
11 the Project. Based on this proposed habitat
12 compensation, there are no predicted adverse
13 impacts on fish habitat due to changes in habitat
14 area resulting from the Project. ^{180 Exhibit 001-001C,}

15 ^{Adobe 679} Mr. Makowecki for DFO testified that he has
16 "a high level of confidence in the success of this
17 fish habitat compensation plan." ^{181 Transcript Vol. 14,}
18 pg. 3647

20 **Effects on Fish**

21 In terms of effects on fish themselves, the
22 fish community within the direct Project footprint
23 is comprised of relatively few resident fish
24 species. And the upper Muskeg River, generally
25 does not provide habitat for migratory species from

1 the Athabasca River.^{182 Exhibit 001-001C, Adobe 654} The
2 Muskeg River diversion channel will maintain
3 connectivity and fish passage and will function to
4 support the upper Muskeg River fish community
5 during operations.^{183 Exhibit 001-015B, Adobe 25} As a
6 result, fish abundance and diversity in the lower
7 reaches of the Muskeg River will be maintained.
8^{184 Transcript Vol. 3, pg. 259} Post-closure, the aquatic
9 habitat reclaimed within the closure landscape will
10 further support local fish populations in the
11 long-term.^{185 Exhibit 001-064B, Adobe 107} As a result,
12 taking into account the mitigation that Shell is
13 proposing, including the Muskeg River diversion
14 channel and the No Net Loss Plan, the EIA concluded
15 that the residual effects of the Project on fish
16 were negligible.^{186 Exhibit 001-001C, Adobe 708; Exhibit 001-015B,}
17^{Adobe 25}

18 Dr. Schindler's report expresses concern
19 about cumulative impacts to the fish community in
20 the upper Muskeg River since the 1970s.^{187 Exhibit}
21^{017-016C, Adobe 6-7} These findings are not supported by
22 other studies of the river and Shell's EIA that
23 show fish communities in the upper reaches of the
24 Muskeg River today are comparable to the fish
25 communities that existed in the 1970s.^{188 Exhibit}

1 001-070A, Adobe 32 To support this position,
2 Dr. Schindler quoted a 1979 study by Bond and
3 Machniak to demonstrate that damage to fish in the
4 Muskeg River is understated and that Shell erred in
5 concluding that there were never arctic grayling in
6 the upper reaches of the Muskeg River. ^{189 Transcript}
7 Vol. 11, pg. 2520 In fact, Bond and Machniak themselves
8 stated that "Grayling were never observed in the
9 Muskeg River upstream of Hartley Creek", which is
10 downstream of the Project. ^{190 Exhibit 017-016U, Adobe pg. 108}

11 The RAMP data presented in the EIA and in
12 Dr. Schindler's presentation do show declines in
13 arctic grayling numbers in the Muskeg River and
14 this was acknowledged in the EIA. However,
15 declines in arctic grayling have been documented
16 throughout Alberta and prior to major oil sands
17 development within this watershed. ^{191 Transcript Vol. 5,}
18 pg. 966 The Bond and Machniak study referenced by
19 Dr. Schindler actually supports the conclusions in
20 the EIA and the Draft No Net Loss Plan that the
21 species distribution within the upper Muskeg River
22 at the location of the Project is primarily
23 restricted to a few resident species and is largely
24 not used by the migratory fish species from the
25 Athabasca River. ^{192 Exhibit 017-016U, Adobe pg. 48}

1 Dr. Schindler's report also states that the
2 benthic invertebrate community of the Muskeg River
3 has been in "catastrophic decline," in his words.
4 193 Exhibit 017-016C, Adobe 4 Dr. Schindler quotes from a
5 1979 study by Barton and Wallace that there was a
6 diverse community of benthic macro-invertebrates in
7 the Muskeg River in 1979 that Dr. Schindler now
8 believes has been lost. Dr. Schindler claimed that
9 these data were ignored by the EIA. These
10 assertions are wrong. Dr. Schindler ignored data
11 from RAMP presented in their 2011 Technical Report
12 which clearly show a consistent presence of these
13 species in the lower reach of the Muskeg River.

14 194 Exhibit 001-070BB, Adobe 2827

15 Mr. Vandenberg explained that the 1979 Barton
16 and Wallace study is simply not comparable with
17 more recent studies, having collected their
18 information at sites far downstream of the upper
19 reaches of the river and such a comparison cannot
20 be used to support a loss of invertebrate taxa.

21 195 Transcript Vol. 15, pg. 3733

22 Finally, in terms of data inclusion in the
23 EIA. The EIA in fact examined additional sources
24 of historical data not considered by Dr. Schindler
25 and added a specific sampling site for examining

1 the benthic macro-invertebrate community within the
2 Project footprint. ¹⁹⁶ Transcript Vol. 15, pg. 3732

3 The damage to benthic invertebrates in the
4 Muskeg River suggested by Dr. Schindler is simply
5 not supported by the evidence. Dr. Schindler
6 simply did not bother to read the EIA and the
7 appendices. If he had done so, these facts would
8 have been obvious to him.

9 Finally, Dr. Jones on behalf of the ACFN
10 filed a report on fish health in the Athabasca
11 River that was generally supportive of Shell's
12 conclusions. The report concluded that:

13
14 "There is no statistical
15 evidence, from the morphometric
16 data, of consistent health impacts
17 on species, site or seasonal
18 basis."

19
20 And:

21
22 "There do not, at this time,
23 appear to be any frank health
24 effects of the fish exposed to
25 contaminates." ¹⁹⁷ Exhibit 006-013,

1 Appendix E, Tab 67, Adobe 2

2 The report also concludes, however, that in
3 general this data supports the hypothesis that
4 contaminants from oil sands operations are reaching
5 the aquatic food webs of the Slave and Athabasca
6 Rivers. ^{198 Exhibit 006-013, Appendix E, Tab 67, Adobe 2} As Shell
7 explained in its October 15th Reply Submission, the
8 conclusion that contaminants from oil sands
9 operations are entering the aquatic food chain is
10 not supported by the evidence. ^{199 Exhibit 001-070A,}

11 ^{Adobe 50} Researchers have been unable to determine
12 the proportions of PAHs in the Athabasca River that
13 are natural versus anthropogenic in origin,
14 although recent studies indicate that the majority
15 of PAHs are from natural sources, which supports
16 the EIA findings. ^{200 Exhibit 001-070V} Dr. Jones agreed
17 during the hearing that his study could not
18 distinguish between natural and anthropogenic PAHs
19 in fish tissue, so there is no basis for his
20 conclusion that any observed increases in fish PAH
21 are related to oil sands operations. ^{201 Transcript}

22 Vol. 10, pg. 2179

23 Finally, Mr. Lambrecht asked questions during
24 the hearing about Shell's proposed compensation
25 lake and whether Shell could ensure that fish

1 exposed to methylmercury in the early years of the
2 compensation lake's operation would be prevented
3 from entering the Athabasca River. ^{202 Transcript Vol. 6,}
4 ^{pg. 1155} Mr. Kovach for Shell explained that Shell
5 has mitigation plans to ensure that humans and
6 wildlife do not consume fish with elevated mercury
7 levels. ^{203 Transcript Vol. 6, pg. 1155} This mitigation will
8 remove the higher trophic-level fish from the lake
9 so that any fish remaining will have lower levels
10 of mercury. ^{204 Transcript Vol. 6, pg. 1157} Given Shell's
11 experience with its existing Jackpine Mine
12 compensation lake and the extensive monitoring plan
13 that Shell plans to carry out, Shell is confident
14 that it will be able to manage any methylmercury
15 issues at the lake. ^{205 Transcript Vol. 6, pgs. 1157-1162}
16 However, Shell has also committed to working with
17 regulators, like Alberta Environment and
18 Sustainable Resource Development, and Fisheries and
19 Oceans Canada, to implement additional safeguards
20 if monitoring determines them to be necessary.
21 ^{206 Transcript Vol. 6, pg. 1166}

22
23 **Human Health**

24 This brings me to human health, which is
25 another concern that has been raised in the

1 hearing. OSEC and ACFN have both expressed
2 concerns about potential loss of access to and the
3 contamination of traditional food and water
4 quality, and the associated psychological stress
5 this can cause, and elevated health risk at Fort
6 Chipewyan.

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

11
12 "Timoney and Lee (2009) and
13 Kelly et al. (2009) both referred
14 to the controversy in Fort
15 Chipewyan concerning apparent
16 elevated cancer rates by noting
17 that PAH are known carcinogens
18 [...] these references to
19 PAH-related cancer risk, even
20 nuanced as they are, are
21 unfortunate because results from
22 neither study provide any evidence
23 to support a human cancer risk from
24 measured PAH. [...] While valid
25 concerns about effects on aquatic

1 organisms from observed PAH
2 concentrations are raised, any
3 extrapolation to or speculation
4 about human cancer risk is
5 unsupported by any of the available
6 toxicological evidence on PAH.
7 Such speculation, in the absence of
8 credible quantitative evidence,
9 does not serve to accurately inform
10 downstream residents and seems
11 likely to create fear." ^{207 Exhibit}

12 001-070A, Adobe 32

13
14 The paper that the Royal Society experts were
15 responding to was co-authored by Dr. Schindler.
16 Not surprisingly, Dr. Schindler took issue with the
17 Royal Society statement during his testimony and
18 claimed that he had communicated with the community
19 of Fort Chipewyan to explain that contaminants were
20 getting into the river but the assessment of
21 dissolved contaminants in the water showed that
22 current levels did not pose a health risk.
23 ^{208 Transcript Vol. 11, pg. 2531} He claimed that this
24 information would have actually allayed the fears
25 of the community, although the testimony of Chief

1 Adam was clear, that the community still believes
2 that human health is being affected by water
3 contamination. ^{209 Transcript Vol. 9, pg. 1967}

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.

14 Dr. Schindler's claims that environmental
15 exposures and the potential implications to public
16 health -- despite Dr. Schindler's claims,
17 ^{210 Transcript Vol. 11, pgs. 2529-2532}, environmental exposure
18 and potential implications to public health have
19 been closely monitored in the oil sands.

20 Mr. Koppe's testimony discussed a number of
21 community health studies that have been conducted
22 since 2000, all of which have shown no adverse
23 health effects caused by oil sands development.
24 ^{211 Transcript Vol. 8, pgs. 1583-1586} Further investigations
25 into concerns related to health are planned for the

1 communities of Fort McKay and Fort Chipewyan to
2 ensure that oil sands operations are not causing
3 any adverse health effects in those communities.

4 212 Transcript Vol. 8, pgs. 1583-1586

5 For the Project, Shell has conducted a Human
6 Health Risk Assessment which used extensive
7 baseline data and took information on cumulative
8 air emissions and water discharges and looked at
9 different ways that people could be exposed to
10 chemicals of potential concern. 213 Transcript Vol. 8,

11 pgs. 1589-1592 It then looked at the risk to the
12 health of the most sensitive local receptors from
13 all possible routes of exposure. 214 Transcript Vol. 7,

14 pg. 1461 What it concluded was that Project emissions
15 alone or in combination with other regional sources
16 are not anticipated to result in a noticeable
17 increase in health risks in the Oil Sands Region.

18 215 Transcript Vol. 3, pg. 271 In addition, existing air
19 quality, water quality, and food quality, are not
20 associated with negative health effects and
21 environmental health risks are expected to remain
22 low over time. 216 Exhibit 001-070A, Adobe 51 I should note

23 that this Health Risk Assessment was a quantitative
24 exercise which followed the prescribed approach
25 that has been developed by regulatory agencies

1 across the globe. ^{217 Exhibit 001-070A, Adobe 51}

2 Put simply, Mr. Chairman, emissions from this
3 Project are expected to have a negligible impact on
4 human health. That conclusion will be verified
5 through a comprehensive monitoring program. Shell
6 will also continue to support regional monitoring
7 efforts like the Wood Buffalo Environmental
8 Association, the Regional Aquatics Monitoring
9 Program, the Alberta Biodiversity Monitoring
10 Institute, and now the joint Canada-Alberta
11 Implementing Plan for Oil Sands Monitoring.

12 ^{218 Exhibit 001-001A, Adobe 476 and 487; Exhibit 001-070A, Adobe 12-13 and}
13 ^{19-20; Transcript, Vol. 3, pg. 271}

14 In its October 15th Reply Submissions, Shell
15 submitted that it is difficult to assess perception
16 issues in the EIA and Health Risk Assessment
17 process as these assessments use a quantitative
18 assessment methodology. However, this is an issue
19 that can be addressed through public consultation
20 and information, ongoing ambient monitoring, and
21 the regular provision of information results to
22 stakeholders during Project operations and closure
23 phases. Shell has committed to each of these
24 measures. ^{219 Exhibit 001-070A, Adobe 51} It is also served
25 by fact-based discussions instead of

1 rhetoric-fuelled media events.

2

3 **Terrestrial Issues**

4 **Wildlife**

5 Let me move on to terrestrial environment and
6 specifically effects on wildlife. This is another
7 topic that attracted considerable attention in the
8 hearing and in the submissions leading up to it.

9 In their October 1st submission, ACFN
10 submitted that historically important subsistence
11 species such as woodland bison and woodland caribou
12 are at dangerously low levels and are scarcely
13 available for traditional resource use throughout
14 the region and that the regional landscape is
15 changing in ways that may lead to the disappearance
16 of wildlife species, including caribou, bison and
17 moose, and to the invasion by other species,
18 including deer, magpies, and invasive plants.

19 220 Exhibit Number 006-013, Adobe 10

20 Similarly, OSEC's October 1st submission
21 claimed that the Project will have significant
22 adverse effects on 13 of 22 species at risk and
23 valued wildlife species. 221 Exhibit 017-016A, Adobe 8 and 17

24 OSEC relies on the CEMA Terrestrial Ecosystem
25 Management Framework, or TEMF, and claims that the

1 Planned Development Case set out in the EIA for the
2 Project will exceed the threshold in TEMF for
3 intensive use of the Regional Municipality of Wood
4 Buffalo. ^{222 Exhibit 017-016A, Adobe 8 and 21}

5 There are several problems with OSEC's
6 submission in this regard.

7 First, it relies almost entirely on changes
8 from the Pre-Industrial Case, which considers all
9 development that has ever occurred in the RSA, to
10 the Planned Development Case, which presents a
11 future-looking scenario that includes projects that
12 may or may not occur in the region.

13 These planned projects will be subject to
14 their own regulatory process and public-interest
15 decision should they proceed to that stage in their
16 development. ^{223 Exhibit 001-070A, Adobe 27} While the
17 Planned Development Case and comparisons to
18 Pre-Industrial Case may provide useful information
19 for regional planning purposes, they are not useful
20 to determine a project's effects.

21 Similarly, the issue of disturbance
22 thresholds on the regional landscape is a matter of
23 government policy on regional or regional land use
24 planning, not the subject of a project-specific
25 review.

1 The basic regional planning document in the
2 Oil Sands Region is the Fort McMurray Athabasca
3 Subregional Integrated Resource Plan, or IRP.
4 That's been mentioned by OSEC and has been recently
5 approved in the LARP. ^{224 Exhibit 001-070S, Adobe 4} The
6 Project is located within the IRP's Mildred-Kearl
7 Lake Resource Management Area. The management
8 intent for that area is, I quote (as read):

9
10 "To promote the orderly
11 planning, exploration and
12 development of resources with
13 emphasis on the area's oil sands
14 reserves." ^{225 Exhibit 001-070H, Adobe 45}

15
16 This is the only stated management intent for
17 the area.

18 There is no balancing mentioned.

19 OSEC has relied on TEMF but TEMF was not
20 adopted by the government and the government has
21 instead focussed on the LARP, which was finalized
22 this Fall. ^{226 Transcript Vol. 9, pg. 1820} While the
23 biodiversity framework under LARP will not be
24 finalized until next year, the LARP explicitly
25 recognizes that one of the primary goals for the

1 region should be to optimize the economic potential
2 of the oil sands resource. 227 Exhibit 001-070S, Adobe 37

3 Mr. Chairman, and Panel Members, it is perfectly
4 acceptable land-use planning to designate certain
5 areas like the Mildred-Kearl Lake area for
6 development, and others such as the Richardson
7 Backcountry, for complete protection. That's good
8 land-use planning.

9 Even the TEMF itself contemplates that energy
10 development will remain a regional priority and a
11 dominant driver of land use in the region and that
12 the achievement of all goals found in TEMF will not
13 be possible on all landscapes in the region
14 simultaneously. 228 Exhibit 001-070A, Adobe 28

15 OSEC has relied on the Natural Range of
16 Variability threshold for the region, or NRV, that
17 was established under TEMF, but the TEMF explicitly
18 states that in some areas of the region, indicators
19 will be far outside NRV while in other areas they
20 would be within NRV. 229 Exhibit 001-070I, Adobe 2 The TEMF
21 was intended as a strategic document and was
22 explicitly not designed for species at risk.

23 230 Exhibit 017-016BB, Adobe 30

24 In addition, although OSEC suggests that the
25 Planned Development Case presented in the EIA for

1 the Project exceeds the TEMF threshold for
2 intensive use in the region, Shell's evidence is
3 that the estimated area of intensive use in the
4 region is only about 8.0 percent, which is below
5 the threshold. ^{231 Exhibit 001-070A, Adobe 28}

6 Finally, the Panel should make its decision
7 on the Project based on the likely effects of the
8 Project itself, not based on what might happen in
9 the future. Any recommendations in relation to the
10 Planned Development Case should be to governments
11 and regulators for planning and management
12 purposes.

13 Dr. Komers for the ACFN filed a report
14 claiming that by 2042 there would be no undisturbed
15 areas left within ACFN's self-defined Regional
16 Study Area. ^{232 Exhibit 006-0130, Adobe 3, 4, 10, 11, and 16} This
17 was based on his assumption that wildlife would
18 completely avoid all areas within 250 metres of an
19 industrial disturbance, including seismic lines.
20 ^{233 Exhibit 006-0130, Adobe 12} In other words, Dr. Komers
21 assumed that there are half-kilometre-wide buffers
22 around every seismic line in the region within
23 which there is no effective wildlife habitat.
24 These corridors are much wider than many of the
25 major pipeline corridors in the country.

1 In cross-examination, Dr. Komers could not
2 identify any literature or research to suggest that
3 wildlife completely avoid any disturbance feature.
4 ^{234 Transcript Vol. 11, pgs. 2618-2619} In fact, he relied in
5 part on a paper written by Mr. Dyer from OSEC that
6 showed caribou, which are particularly sensitive to
7 industrial disturbance, actually prefer some areas
8 within 250 metres of seismic lines. ^{235 Exhibit 001-051N,}

9 Adobe 8

10 Dr. Komers also did not consider that large
11 portions of the ACFN RSA were conservation areas
12 and parks. ^{236 Transcript Vol. 11, pg. 2622} Rather,
13 Dr. Komers took the historical rate of disturbance
14 in the region and applied that as a constant into
15 the future without any consideration of external
16 factors.

17 What he did was he took two numbers, he
18 multiplied them together without any analysis or
19 thought. What that proves is that Dr. Komers knows
20 how to do math. It does not present any reasonable
21 prediction of cumulative effects in the region and
22 its conclusions defy both logic and commonsense.

23 Shell's witnesses explained at the hearing
24 that literature suggests wildlife will treat
25 different types of disturbance differently, and

1 there is no complete loss of habitat within zones
2 of influence. ^{237 Transcript Vol. 6, pg. 1045} This was the
3 approach that was used in the EIA and reflects a
4 realistic and thoughtful analysis of what the
5 effects are likely to be of the Project.

6 Turning specifically to effects on wildlife,
7 Shell's EIA focused on three types of effects to
8 determine ecological consequences: Habitat loss;
9 wildlife movement; and wildlife abundance. This
10 assessment concluded that the environmental
11 consequences of habitat loss during construction
12 and operations are high at the LSA scale for all
13 affected species prior to closure. ^{238 Exhibit 001-051F,}
14 Adobe ¹¹⁴ The Project is also expected to result in
15 indirect habitat loss through sensory disturbance
16 and surficial aquifer drawdown. While species like
17 the yellow rail, rusty blackbird and horned grebe
18 will experience net losses of habitat due to the
19 loss in wetlands, particularly peatlands, species
20 including black bears, Canada lynx, beavers, and
21 the Canada warbler, will benefit from the large
22 increases in productive forests and associated
23 terrestrial uplands that develop after reclamation.

24 ^{239 Exhibit 001-001E, Adobe 207; Transcript, Vol. 3, pg. 265}

25 At the local scale, habitat loss for the

1 Project will have a high environmental consequence
2 for several species that rely on wetlands,
3 including yellow rail. However, for those species,
4 the best available information suggests that
5 species abundance is not limited by habitat in
6 northeast Alberta. ^{240 Exhibit 001-015C, Adobe 3} An ABMI
7 report recently concluded that songbird
8 species-at-risk habitat in the Oil Sands Region is
9 89 percent intact. ^{241 Exhibit 001-070B, Adobe 31} In
10 addition, there will be abundant alternative
11 habitat in the region for these species. ^{242 Exhibit}
12 ^{001-001E, Adobe 182} Wetlands comprise approximately
13 39.8 percent of the total region at Base Case and
14 the Project will only reduce that number to
15 39.3 percent. ^{243 Transcript Vol. 3, pg. 266, Exhibit 001-001E,}
16 ^{Adobe 135} Therefore, wetlands will remain abundant in
17 the Regional Study Area and wildlife that depend on
18 wetlands will have extensive alternative habitat
19 available for them. As a result, the EIA
20 concluded that habitat loss from the Project is not
21 likely to affect the viability of the regional
22 populations of any wildlife species.

23 In terms of wildlife movement, the Project
24 will have an adverse effect on wildlife movement,
25 but wildlife movement around the Project footprint

1 is expected to be sufficient to maintain genetic
2 connectivity in the RSA. ^{244 Exhibit 001-070A, Adobe 47}

3 This conclusion will be verified through Shell's
4 commitment to monitor the presence, relative
5 abundance, and distribution of wildlife in the
6 Project area, and its involvement in regional
7 monitoring initiatives, such as the Wildlife
8 Habitat Effectiveness and Corridor Program
9 Technical Committee under CONRAD which conducts
10 regional-scale wildlife monitoring to examine
11 movement patterns and inform decisions regarding
12 appropriate setback distances and corridor widths
13 for wildlife along project boundaries and adjacent
14 to rivers. ^{245 Exhibit 001-070A, Adobe 47}

15 For wildlife abundance, the EIA concluded
16 that direct mortality for wildlife as a result of
17 site clearing, interactions with Project
18 infrastructure, and Project vehicles, removal of
19 nuisance wildlife, and sensory disturbance, will
20 have a negligible-to-low-magnitude effect after
21 mitigation measures have been implemented. ^{246 Exhibit}
22 ^{001-001E, Adobe 167} The measures include the relocation
23 program that Shell has committed to for the western
24 toad. ^{247 Exhibit 001-070A, Adobe 18} There will be no
25 effects on site clearing on species like

1 black-throated green warbler and yellow rail
2 because clearing will occur during the winter when
3 these species are not present. ^{248 Exhibit 001-006E,}

4 ^{Adobe 374} As a result, the EIA concluded that the
5 effects of the Project on wildlife abundance would
6 be low to negligible for all indicated species.

7 ^{249 Exhibit 001-001E, Adobe 172 and 175}

8 Significance of adverse ecological
9 consequences was determined by examining the
10 ecological context within which the ecological
11 consequences occur, in accordance with guidance
12 from the Canadian Environmental Assessment Agency.

13 ^{250 Exhibit 001-063, Adobe 67; CEA Agency, *Reference Guide: Determining*}
14 ^{*Whether a Project is Likely to Cause Significant Adverse Environmental*}
15 ^{*Effects* (Ottawa: Federal Minister of Supply and Services Canada, 1994),}
16 ^{online: <<http://www.ceaa-acee.gc.ca/D213D286-2512-47F4-B9C3-08B5C01E5005>}
17 ^{[/Determining_Whether_a_Project_is_Likely_to_Cause_Significant_Adverse_](http://www.ceaa-acee.gc.ca/D213D286-2512-47F4-B9C3-08B5C01E5005)}
18 ^{[Environmental_Effects.pdf](http://www.ceaa-acee.gc.ca/D213D286-2512-47F4-B9C3-08B5C01E5005)> at 190} The ecological context

19 includes the concept of resiliency. "Resilience"
20 refers to the ability of ecological systems to
21 absorb disturbance and maintain system integrity
22 and function. ^{251 Exhibit 001-063, Adobe 67} For the
23 purposes of Shell's Wildlife Assessment, cumulative
24 effects to wildlife were considered to be
25 significant if they compromise resilience such that

1 the populations are likely no longer to be
2 self-sustaining, ecological effective populations.
3 ^{252 Exhibit 001-063, Adobe 67} Using the concept of
4 ecological context to ascertain the significance of
5 project and cumulative effects requires that the
6 assessment of significance be considered at a scale
7 beyond the Local Study Area, because the
8 environmental consequences at the local scale are
9 for the most part de facto high. The CEAA Agency's
10 guidance is clear that it is important to evaluate
11 significance in consideration of other than just
12 local direct effects. ^{253 CEA Agency, "Cumulative Effects}
13 ^{Assessment Practitioners Guide" (February 1999) online:}
14 ^{<Http://www.ceaa-acee.gc.ca/43952694-0363-4B1E-B2B3-47365FAF1ED7/Cumulative_}
15 ^{Effects_Assessment_Practitioners_Guide.pdf> at 17} Therefore,
16 Shell's assessment considered the effects on
17 wildlife indicators and species at risk at the
18 scale of the Regional Study Area.

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

24

25

"The measure for determining

1 significant adverse effects should
2 be any net harm to an individual of
3 a species, its resident, or its
4 critical habitat." ²⁵⁴ Exhibit No.
5 017-016DD, Adobe 72

6
7 Mr. Wiacek reiterated this position in his
8 testimony during the hearing. ²⁵⁵ Transcript Vol. 14,
9 pgs. 3672-3674 With respect, Shell disagrees. Using
10 this definition fetters the discretion of Panels to
11 actually consider the evidence before it and
12 determine objectively what the impacts of a project
13 are. At law, this is incorrect. ²⁵⁶ Robert W. Macaulay and
14 James, L.H. Sprague, Practice and Procedures Before Administrative
15 Tribunals, loose-leaf consulted on November 5, 2012, (Toronto: Carswell,
16 1988), at 5B-21-5B 24.4 Perhaps more importantly, it also
17 ignores the application of ecological consequence
18 and resilience when determining the significance of
19 adverse effects, which the CEAA agency recommends,
20 and is also contrary to standard environmental
21 assessment practices.

22 If significance were always to be determined
23 at the local scale, any new development would have
24 significant effects. This would be nonsensical.
25 As suggested by the agency, the significance of

1 environmental effects should be based on the
2 following criteria: Direction, magnitude,
3 geographic extent, duration, reversibility,
4 frequency, and ecological context. This was the
5 approach taken by Shell. ^{257 Exhibit 001-15C, Adobe 14}

6 Based on a combination of effects on habitat
7 loss, wildlife movement, and wildlife abundance,
8 followed by an examination of the ecological
9 context in which the ecological consequences of the
10 Project would occur, the EIA concluded that the
11 effects of the Project on wildlife are not likely
12 to be significant. ^{258 Exhibit 001-051E, Adobe 87}

13 OSEC has argued that a 20 percent decline in
14 habitat for any one species is an ecological
15 threshold that should be equivalent to a
16 significant adverse impact. ^{259 Exhibit 017-016, Adobe 17}
17 This is the basis for OSEC's claim that cumulative
18 effects will be significant for 13 of 22 species at
19 risk and valued wildlife species, even though the
20 habitat loss numbers that OSEC uses for this
21 calculation are from Shell's assessment of
22 cumulative effects from the Pre-Industrial Case to
23 the Planned Development Case, and are thus not
24 specific to the Project. In addition, despite
25 OSEC's earlier submission that this 20 percent

1 limit was an ecological threshold,^{260 Exhibit 017-016A}
2 Adobe 18 OSEC conceded during the hearing that the
3 20-percent threshold was more of a social-economic
4 threshold and was somewhat of a value judgment in
5 terms of what proportion of wildlife habitat
6 Albertans and Canadians are willing to lose.
7 261 Transcript Vol. 9, pgs. 1754-1755 and 1822 Mr. Dyer explained
8 that this threshold was not based on any ecological
9 criteria suggesting catastrophic decline but was
10 more akin to a socio-economic threshold like a
11 speed limit. 262 Transcript Vol. 9, pgs. 1822-1823

12 The literature suggests that using 20 percent
13 habitat loss as a threshold is highly conservative.
14 For example, in Swift and Hannon's review regarding
15 critical thresholds for a number of taxa, the
16 authors concluded that although evidence was
17 limited, most empirical thresholds fell in the
18 range of 10 to 30 percent remaining habitat, or
19 disturbance of 70 to 90 percent. 263 Exhibit 001-070HH,
20 Adobe 16 Similarly, Romprey et al. concluded that,
21 for species with large home ranges, such as birds,
22 thresholds are generally between 30 and 40 percent
23 of habitat still remaining, or disturbance of 60 to
24 70 percent. 264 Exhibit 001-070A, Adobe 28 Another study,
25 Betz et al. studied songbird habitat and concluded

1 that landscape thresholds ranged from 8.6 to
2 28.7 percent habitat remaining, or disturbance of
3 roughly 70 to 90 percent of the habitat. ^{265 Exhibit}
4 001-051E, Adobe 23

5 Nevertheless, Shell's EIA did use the
6 conservative value of 20 percent habitat loss as an
7 indicator of high-magnitude habitat loss. That
8 does not mean, however, that 20 percent habitat
9 loss is necessarily a significant adverse effect.
10 The determination of significance was based on the
11 combination of all aspects of the assessment and
12 wildlife ecology and not just the amount of habitat
13 lost or remaining. ^{266 Exhibit 001-070A, Adobe 28; Transcript}

14 Vol. 7, pgs. 1375, 1377-1378 If a certain species is not
15 habitat limited, for example, 20 percent habitat
16 loss will likely not be significant adverse effect
17 for that species. Again, this approach is
18 consistent with guidance from the CEAA agency which
19 is that significance determination should be
20 determined on several criteria, which I've outlined
21 already. Environment Canada endorsed this approach
22 to determining significance as well. ^{267 Transcript}

23 Vol. 14, pg. 3610 It also reflects that the Panel's
24 decision should be based on fact and analysis and
25 not arbitrarily-imposed numbers.

1 Although Environment Canada agreed with the
2 overall approach Shell used, Mr. Wiacek
3 misinterpreted how the approach to determining
4 significance was applied. ^{268 Transcript Vol. 14,}
5 pgs. 3605-3606 Mr. Wiacek interpreted Shell's
6 methodology as meaning that if a species is
7 extirpated over the long-term within the Regional
8 Study Area, the effect will not be significant if
9 the Project has no contribution to the overall
10 resilience of that population at either the
11 provincial or national scale. ^{269 Transcript Vol. 14,}
12 pg. 3605 He went on to state that Shell did not
13 assess significance appropriately because Shell
14 expanded the area that was considered to the
15 provincial and national scale. ^{270 Transcript Vol. 14,}
16 pgs. 3605-3606 That interpretation is not correct.
17 Shell's approach is that if a species is
18 declining in Alberta or across its North American
19 range, but the cause of the decline is not
20 associated with the Project or cumulative effects
21 within the RSA, the cumulative effects assessment
22 would conclude that the effects within the RSA are
23 not in fact significant. ^{271 Exhibit 001-063, Adobe 67} This
24 approach is appropriate because it focusses on the
25 effects within the RSA that may act cumulatively

1 with the effects of the Project.

2 With respect to ACFN's concerns around wood
3 bison, caribou and moose, ACFN claims that the
4 opportunity for bison recovery is dwindling with
5 the increasing disturbance of bison habitat.

6 ^{272 Exhibit 006-0130, Adobe 25} That assertion is not
7 supported by the facts. ACFN's own expert,
8 Dr. Komers, agreed with Shell that bison are not
9 habitat-limited in northeast Alberta. ^{273 Exhibit}

10 ^{001-070A, Adobe 47; Transcript Vol. 11, pg. 2620} Disease has been
11 one of the reasons for historic population
12 declines. ^{274 Transcript Vol. 14, pg. 3519} In addition, at
13 present, some wood bison populations in the region
14 are actually increasing. For example, Mr. Wiacek
15 for Environment Canada testified that between 2001
16 and 2012, wood bison populations in Wood Buffalo
17 National Park have increased approximately
18 threefold. ^{275 Transcript Vol. 14, pg. 3617} Finally, the EIA

19 concluded that the Project will have negligible
20 effects on wood bison because wood bison do not
21 occur on the east side of the Athabasca River where
22 the mine will be located. ^{276 Exhibit 001-070A, Adobe 46}

23 Woodland caribou are also virtually absent
24 from the Project LSA and the Project is located
25 many kilometres from the nearest caribou herd

1 range. Shell concluded that the Project will have
2 negligible effects on caribou. ^{277 Exhibit 001-015C, Adobe 2;}
3 Transcript Vol. 7, pgs. 1429 and 1434 Shell acknowledges that
4 caribou are declining in the Regional Study Area as
5 a result of indirect cumulative effects of
6 development, including issues such as predation.

7 However, the regional decline in caribou
8 populations is part of a national trend for many
9 caribou herds and that has led to the recent
10 release of the Federal Recovery Strategy for
11 Woodland Caribou. This Recovery Strategy requires
12 the provinces to develop range plans for each
13 non-sustaining caribou herd to ensure long-term
14 recovery of woodland caribou across Canada.

15 ^{278 Exhibit 001-0700, Adobe 55} Shell continues to support
16 these and other caribou initiatives in the Oil
17 Sands Region, including through bodies such as the
18 Oil Sands Leadership Initiative and COSIA.

19 ^{279 Transcript Vol. 7, pg. 1432}

20 For moose, population levels in the Regional
21 Study Area are affected by a number of factors,
22 including habitat, predation, access, and hunting.
23 ^{280 Exhibit 001-083, Adobe 4; Transcript Vol. 8, pg. 1618} Although
24 moose populations in the region are likely to be
25 declining, there is nothing to suggest that the

1 primary cause of this decline is habitat loss as
2 habitat quality and availability assessment
3 suggests that moose populations remain well below
4 the carrying capacity of the environment. ^{281 Exhibit}
5 017-024, Adobe 4 Shell's witnesses explained during the
6 hearing that the primary cause of moose decline in
7 the region are likely hunting and predation, which
8 will be unaffected by the Project. ^{282 Exhibit 001-083,}
9 Adobe 4; Transcript Vol. 8, pg. 1618 As a result, the EIA
10 concluded that the likely impacts of the Project on
11 moose abundance, habitat, and movement, after
12 closure and reclamation in the RSA will either be
13 low or negligible. ^{283 Exhibit 001-070A, Adobe 47; Exhibit}
14 001-051F, Adobe 109 Similarly, the cumulative effects of
15 effect of development on moose are not considered
16 to be likely significant adverse effects. ^{284 Exhibit}
17 001-083, Adobe 4

18 Finally, counsel for the CEAA agency also
19 raised questions about effects of the Project on
20 yellow rail and conservation offsets.
21 Mr. Jalkotzy explained that declines in yellow rail
22 populations across North America are largely due to
23 wetland losses in the prairie region further south.
24 ^{285 Transcript Vol. 7, pg. 1441} In addition, there is a
25 substantial amount of yellow rail habitat available

1 in the Regional Study Area outside of the Project
2 footprint and therefore yellow rail will have
3 extensive alternative habitat for them.^{286 Transcript}
4 Vol. 7, pg. 1442 As a result, the Project was predicted
5 to have negligible effects on the yellow rail
6 within the RSA.^{287 Exhibit 001-015C, Adobe 3}

7 In terms of conservation offsets, the
8 witnesses explained that the Project itself is not
9 likely to result in any significant adverse effects
10 and therefore Project-specific offsets are not
11 necessary.^{288 Transcript Vol. 7, pgs. 1413-1414} On a regional
12 basis, cumulative effects should be addressed by
13 all industry and government through regional
14 planning initiatives like LARP. The Province is in
15 fact taking steps to address these cumulative
16 effects through conservation areas under LARP,
17 which expanded conservation areas from 6 percent of
18 the region to 24 percent of the region,^{289 Exhibit}
19 001-070S, Adobe 83-84 developing a biodiversity framework
20 for the region and a Land Disturbance Plan by the
21 end of 2013, both of which are likely to be in
22 place before Shell's proposed start-up of the
23 Project, and also the Province's Wetlands Policy,
24 will also address this issue.^{290 Transcript Vol. 7,}
25 pgs. 1413-1414

1 In it's October 1st submission, Environment
2 Canada referenced its Operational Framework for Use
3 of Conservation Allowances. ^{291 Exhibit 005-020, Adobe 65}
4 At page 6 of that document, Environment Canada
5 states this, and I quote:

6
7 "Another jurisdiction may
8 have established a conservation or
9 land-use plan that adequately
10 addresses the proposed impact. The
11 measures put in place by the other
12 jurisdiction would need to be
13 reviewed carefully to ensure that
14 Environment Canada's allowance
15 criteria are addressed. For
16 example, a province or a regional
17 land-use plan may contemplate
18 expected land or resource-use
19 activities and set aside protected
20 areas ahead of time in anticipation
21 of the adverse environmental
22 impacts associated with these
23 expected activities. In this case,
24 the protected area could function
25 as a 'habitat bank' from which

1 future allowances could be
2 obtained."

3
4 The Alberta Government is managing the Oil
5 Sands Region and has identified through the LARP
6 areas where development can occur and areas that
7 are required to be protected. Based on Environment
8 Canada's document, the Panel can rely on these
9 conservation areas as compensating for habitat loss
10 from this and other projects in the region.

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

13 THE CHAIRMAN: It's just right, sir. I have
14 10:20. We'll break for 20 minutes.

15

16 **(The morning adjournment)**

17

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

24 So I have about 10:42. So we'll look at it
25 in an hour and see if we want to take our lunch

1 break then, depending on where you are,
2 Mr. Denstedt.

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

9 THE CHAIRMAN: Excellent.

10 MR. DENSTEDT: Shall I start?

11 So where we left off was at migratory birds
12 and tailings ponds, which is the next issue that I
13 wanted to talk about.

14

15 **Migratory Birds/Tailings Ponds**

16 Several interveners, including ACFN, raised
17 concerns about migratory birds and tailings ponds.
18 For example, Ms. Hechtenthal submitted an Avian
19 Hazard Report on behalf of ACFN that raised
20 concerns with birds becoming oiled in tailings
21 ponds and the effectiveness of mitigation measures
22 to address that concern. ^{292 Exhibit 006-013AA}

23 The effects of tailings ponds on waterfowl
24 and other migratory birds was assessed explicitly
25 in the EIA as well as in Shell's 2012, May 2012 and

1 September 7, 2012 submissions to the JRP. ^{293 Exhibit}
2 001-070A, Adobe 48 This assessment relied on experience
3 with existing oil sands tailings ponds for which
4 comprehensive monitoring programs are in place to
5 detect bird mortalities. At Shell's existing
6 operations, for example, Mr. Martindale explained
7 that each tailings pond is monitored every day
8 specifically for bird mortalities, amounting to
9 thousands of person hours every year, and all
10 detected mortalities are reported to the
11 government. ^{294 Exhibit 001-006C, Adobe 330; Transcript Vol. 4,}
12 pgs. 593-597

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. ^{295 Exhibit 001-006C,}
17 Adobe 292; Transcript Vol. 3, pg. 220; Exhibit 006-013U, Adobe 161 The
18 system also fails on; that means that if the system
19 goes down, the cannons will continue to operate
20 based on stored solar power. ^{296 Transcript Vol. 4, pg. 604}
21 The bird-deterrent system has been highly effective
22 in preventing waterfowl from landing on Shell's
23 tailings ponds. ^{297 Transcript Vol. 4, pg. 592} In addition,
24 Shell continues to work with other industry members
25 to improve bird-deterrent technology and will

1 continue to implement new measures that are found
2 to be more effective. ^{298 Exhibit 001-070A, Adobe 17}

3 According to the 2011 Annual Report of the
4 Regional Bird Monitoring Program for the Oil Sands
5 Region, the total number of birds recovered from
6 all the tailings ponds in the Oil Sands Region in
7 2011 was 70, with most of them being ducks.

8 ^{299 Transcript Vol. 10, pg. 2464; Exhibit 006-103W, Adobe 3} At

9 Shell's tailings ponds, the total was 15. ³⁰⁰

10 ^{Transcript Vol. 4, pg. 604} In contrast, wind turbines kill
11 hundreds of thousands of birds each year, and Ducks
12 Unlimited members hunt tens of millions. ^{301 Transcript}

13 ^{Vol. 4, pg. 604} Ecojustice and Earth Justice submitted
14 that between 22 million and 170 million birds breed
15 in the Oil Sands Region. ^{302 Exhibit 021-009, Adobe 3}

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

20 ^{303 Transcript Vol. 14, pg. 3670}

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

1 broader context.

2 Ms. Hechtenthal claims that it is highly
3 likely that industry reports do not account for all
4 avian deaths because oiled and waterlogged birds
5 sink out of the view quickly and likely go
6 undocumented. ^{304 Exhibit 006-013AA, Adobe 8} However, Shell
7 explained in its Reply Submission in October that
8 the number of bird mortalities reported by industry
9 is not underreported, because any birds that become
10 waterlogged and sink will ultimately gasify and
11 float to the surface as they decompose. ^{305 Exhibit}
12 ^{001-070A, Adobe 48} Therefore, Shell concluded it is
13 unlikely that waterfowl mortalities occur on
14 tailings ponds that are not recorded and reported.

15 A further specific issue that was raised by
16 Environment Canada relates to the whooping crane.
17 Shell's witnesses explained during the hearing that
18 despite extensive surveys over the last 20 years,
19 there have been very few sightings of whooping
20 crane in the Oil Sands Region. ^{306 Transcript Vol. 7,}
21 ^{pg. 1435} While recent radio-tracking data shows that
22 whooping crane migrate over the oil sands, it also
23 shows that whooping crane have avoided existing oil
24 sands tailings ponds. This is likely due to the
25 fact that whooping crane prefer to rest in fens

1 that are very different habitats from tailings
2 ponds, as well as the effectiveness of
3 bird-deterrent systems that oil sands operators
4 have in place. ^{307 Transcript Vol. 7, pgs. 1436-1438}

5 Let me move on to reclamation.

6

7 **Reclamation**

8 ACFN's expert Dr. Gutsell suggested that
9 reclamation simply does not work. ^{308 Exhibit 006-0130,}

10 ^{Adobe 35} Similarly, Dr. Schindler on behalf of OSEC
11 submitted that reclamation to a landscape of
12 equivalent habitat is not possible. ^{309 Exhibit 017-016C,}

13 ^{Adobe 12} Mr. Chairman, those statements do not rely
14 on reality.

15 The reclamation requirement in Alberta is not
16 to create a landscape that is identical to the
17 pre-disturbed state, as Dr. Gutsell seemed to
18 suggest. The goal is to reestablish a functional
19 landscape that provides equivalent land capability.

20 ^{310 Conservation and Reclamation Regulation, Alta Reg. 115/93, s. 2} It
21 also considers the decisions of locally-affected
22 stakeholders, and in particular Aboriginal groups,
23 who will be using the reclaimed landscape
24 post-closure. Returning the reclaimed landscape to
25 equivalent capability is not only possible but it

1 has been done or is in progress at a number of
2 sites in the Oil Sands Region, including tailings
3 ponds. ^{311 Exhibit 001-070A, Adobe 32; Transcript Vol. 3, pg. 422} In
4 addition, there are a variety of examples around
5 the world and in Canada of mine reclamation being
6 successful. <sup>312 Transcript Vol. 3, pg. 456; Transcript Vol. 7,
7 pgs. 1445-1446</sup> Successful reclamation is not new to
8 this province.

9 Oil sands reclamation has been the focus of
10 considerable research through CEMA, CONRAD, and
11 other bodies, and Shell is an active supporter of
12 that work. ^{313 Exhibit 001-070A, Adobe 32; Transcript Vol. 3, pg. 458}
13 There is a large volume of research on the subject
14 of boreal reclamation with particular emphasis on
15 reclamation in the Oil Sands Region and it shows
16 that reclamation in the oil sands can be effective.
17 ^{314 Exhibit 001-104} Wildlife are returning to these
18 reclaimed sites. ^{315 Transcript Vol. 3, pg. 422}

19 As a result, the Royal Society of Canada's
20 expert panel report concluded that functional
21 upland landscapes in the oil sands can be reclaimed
22 using current reclamation technologies. <sup>316 Exhibit
23 001-070EE, Adobe 310</sup>

24 In addition, CEMA's Guidelines for
25 Reclamation in the Athabasca Oil Sands Region

1 provide more than 400 pages of information about
2 reclamation techniques and monitoring results in
3 the region and are among the most comprehensive in
4 any industry. ^{317 Exhibit 001-070K} This was a document
5 that ACFN's expert, Dr. Gutsell, completely ignored
6 in her report without comment. It seems to be a
7 fundamental fallacy to ignore the actual
8 reclamation guidelines used by developers while at
9 the same time criticizing their efforts.

10 Vegetation, succession, and ecosystem
11 development, is a long process under natural
12 conditions and the same is true for reclamation
13 sites. ^{318 Exhibit 001-001A, Adobe 617} Studies have shown the
14 ingress of native species onto these sites and
15 continued research has indicated other techniques
16 such as woody-debris placement can be used to
17 enhance reclamation diversity and ecosystem
18 functionality. ^{319 Exhibit 001-104; Vitt et al. 2011, cited in}

19 ^{Exhibit 001-070A, Adobe 32} It is expected that over time,
20 emergent properties such as biodiversity,
21 structural complexity, and microbiotic activity,
22 will continue to develop on the reclaimed
23 landscape. ^{320 Exhibit 001-001E, Adobe 616, and 627-628}

24 Shell has shown a commitment to progressive
25 landscape at Muskeg River Mine and Jackpine Mine by

1 maximizing areas of permanent and temporary
2 reclamation on areas completed by operations and
3 available for reclamation activities. Although
4 some interveners have pointed to the lack of
5 reclamation that Shell has achieved to date on its
6 existing oil sands mines, the reclamation process
7 takes many years, and reclamation cannot be started
8 until operations in a specific area are completed;
9 which for long-life production projects such as
10 Shell's, can be decades. ^{321 Transcript Vol. 3, pg. 425}
11 Shell's Oil Sands Projects are still in the early
12 phases of development.

13 Mr. Martindale testified that Shell is
14 already doing as much as possible towards
15 progressive reclamation. ^{322 Transcript Vol. 6, pg. 1169}
16 Shell is required to report to the Alberta
17 Government on an annual basis and to meet with them
18 to discuss Shell's Reclamation Plans and
19 demonstrate that they line up with industry
20 standards. ^{323 Transcript Vol. 3, pgs. 425-426}

21 Shell is also required to comply with the
22 Province's Mine Financial Security Program, which
23 ensures that sufficient funds are secured in
24 advance to cover the costs of reclamation.

25 In addition, if Shell or any other operator

1 fails to meet its progressive reclamation targets
2 as set out in its plans, there are serious
3 penalties imposed upon them. ^{324 Transcript Vol. 8,}
4 pgs. 1639-1640

5 Shell has filed Preliminary Closure Drainage
6 and Closure Conservation and Reclamation Plans for
7 the Project, ^{325 Exhibit 001-002B} which are based on the
8 CEMA guidance and the requirements of ESRD. The
9 Closure Drainage Plan explains how both groundwater
10 and surface water will be managed and integrated
11 into the surrounding landscape through features
12 like sand-caps, closure channels, constructed
13 wetlands, and pit lakes. These closure landscape
14 features have been designed geomorphically to act
15 like natural systems that are capable of managing
16 anticipated flux of process-affected groundwater
17 and a range of runoff flow conditions. ^{326 Exhibit}
18 001-022, Adobe 11-13 and 18

19 In addition, the end pit lakes have been
20 configured and appropriately sized in consideration
21 of a number of factors, including hydrologic
22 sustainability, flood attenuation, water-treatment
23 capability, littoral-zone development, and
24 shoreline protection. ^{327 Exhibit 001-002B, Adobe 23-24 and 45-47}

25 For terrestrial reclamation, Shell determined

1 that direct placement of subsoil and topsoil on a
2 newly-prepared landscape is a preferred method of
3 reclamation as it can take advantage of an active
4 and viable seed bank in the soil. It reduces the
5 amount of land required for soil storage and it
6 allows operations to handle the material only once.
7 ^{328 Transcript Vol. 5, pgs. 927-930} After the plants and
8 seeds in the topsoil have germinated and
9 established, the site will be evaluated and
10 additional trees and shrubs may be planted in order
11 to achieve the ecosites described in Shell's
12 Reclamation and Closure Plan. ^{329 Exhibit 001-002B} The
13 success of this type of terrestrial reclamation has
14 been well documented in the literature. ^{330 For example,}
15 ^{Exhibit 001-104}

16 Shell's Closure Drainage and Closure
17 Conservation and Reclamation Plans for the Project
18 will be updated regularly taking into account
19 knowledge gained from ongoing reclamation research
20 being undertaken by Shell in groups like CEMA's
21 Reclamation Working Group, Canadian Oil Sands
22 Network for Research and Development, the Oil Sands
23 Tailings Consortium, and now Canada's Oil Sands
24 Innovation Alliance. ^{331 Transcript Vol. 3, pg. 264} These
25 plans will also incorporate input from Aboriginal

1 communities through bodies such as the Shell Fort
2 McKay Reclamation Focus Group. ^{332 Exhibit 001-040E,}

3 Adobe 41; Transcript Vol. 3, pg. 464

4 Shell has also committed to developing a
5 biodiversity monitoring program to monitor the
6 success of reclamation and establishment of
7 biodiversity for the Project. This monitoring
8 program will consider protocols established by the
9 Alberta Biodiversity Monitoring Institute, which
10 Mr. Dyer for OSEC has called "world class,"
11 ^{333 Transcript Vol. 9, pg. 1826} including protocols for
12 winter track counts, breeding-birds surveys,
13 vegetation surveys, and incidental wildlife
14 observations. ^{334 Exhibit 001-001H, Adobe 843} It will also
15 comply with the Biodiversity Framework under LARP
16 which is expected to be released next year. ^{335 Exhibit}
17 ^{001-070A, Adobe 16} This monitoring will determine the
18 effectiveness of reclamation, and based on the
19 results of this monitoring, and any subsequent
20 adaptive management, Shell will ensure that the
21 reclaimed landscape is returned to an equivalent
22 landscape capability post-closure.

23

24 **Wetlands and Old Growth Forest**

25 Another issue that was raised by OSEC in the

1 hearing was the effects of the Project on wetlands
2 and old-growth forest.

3 Shell recognized the Project will have an
4 adverse effect on wetlands, direct and indirect
5 effects of the Project will affect the majority of
6 the wetlands within the Local Study Area. This
7 will have high environmental consequences at the
8 local scale. At the regional level, however,
9 effects of the Project on wetlands will be
10 negligible. ^{336 Exhibit 001-051F, Adobe 90} In the Base Case,
11 wetlands comprise approximately 39.8 percent of the
12 total Regional Study Area. The Project will reduce
13 that number to 39.5 percent, ^{337 Transcript Vol. 3, pg. 266,}
14 ^{Exhibit 001-001E, Adobe 135} a change of 0.3 percent. All
15 developments in the Planned Development Case will
16 reduce this number by a further 2.0 percent.
17 ^{338 Exhibit 001-051G, Adobe 136}

18 However, wetlands, including peatlands, will
19 remain abundant in the Regional Study Area, and
20 wildlife that depend on wetlands and peatlands will
21 have extensive alternative habitat available for
22 them. Shell's Reclamation Plans also include large
23 constructed wetlands that will provide a number of
24 important functions in the closure landscape,
25 including habitat provision, run-off flow

1 attenuation, biodegradation, and sediment capture.

2 339 Exhibit 001-002B As a result, Shell concluded that
3 the Project will not have significant adverse
4 effects on wetlands or peatlands in the RSA.

5 340 Exhibit 001-070A, Adobe 29

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

11 341 Exhibit 001-001E, Adobe 145; Exhibit 001-070MM Dr. Schindler,
12 in his testimony, dismissed the Vitt et al.
13 research as not applicable because it was conducted
14 in the Peace River country and focused on
15 reclamation of well-sites and therefore could not
16 be applied to reclamation of mined lands.

17 However, the first question posed by those
18 researchers was this: "Will locally available
19 peatland vascular plants establish on wet compact
20 mineral soils?" 342 Exhibit 001-070MM, Adobe 2 Wet mineral
21 soils will be used for reclamation of the mine
22 areas. The results of the work are directly
23 applicable to reclamation on the Project lands,
24 contrary to Dr. Schindler's assertions.

25 Shell has also partnered with Wetlands

1 International and Ducks Unlimited Canada to develop
2 its reclamation strategy, and Shell continues to
3 actively participate in research activities of
4 CEMA's Wetlands and Aquatics Group and CONRAD's
5 Environmental Research Group. ³⁴³ Transcript Vol. 3, pg. 267,

6 ²⁶⁹ These efforts will supplement the government's
7 regional planning, initiatives such as LARP, to
8 ensure that the region retains viable healthy
9 ecosystems. In that regard, Shell is committed to
10 comply with both the pending Biodiversity Framework
11 being developed under the LARP, and the Alberta
12 Wetlands Policy, once they are released. ³⁴⁴ Exhibit

13 001-070A, Adobe 16

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.

17 ³⁴⁵ Exhibit 001-051F, Adobe 88 This represents about
18 40 percent of the old-growth forest in the Local
19 Study Area, but approximately only 0.1 percent of
20 old-growth forest in the RSA. ³⁴⁶ Exhibit 001-051F, Adobe 89

21 Given the very small percentage of old-growth that
22 this Project will affect within the RSA, the EIA
23 concluded that the Project's effects on old-growth
24 forests will not be significant. ³⁴⁷ Exhibit 001-051F,

25 Adobe 105-106

1 Ms. Campbell for OSEC suggested that since
2 the post-closure landscape in the LSA will be dryer
3 than at present, it will be more prone to forest
4 fires and will thus not likely support old-growth
5 forest in the future. ^{348 Transcript Vol. 9, pg. 1761} When
6 these types of questions were put to the Shell
7 witnesses, however, they testified that the Project
8 area will support the return of old-growth in the
9 future and the LSA will not necessarily be more
10 prone to forest fires. ^{349 Transcript Vol. 5, pgs. 942-943}
11 As I discussed earlier, climate-change models for
12 the region produce a variety of predictions, some
13 say it will be warmer and drier; others say it will
14 be warmer and wetter. ^{350 Exhibit 001-092, Adobe 15} If the
15 climate becomes wetter, the frequency of fire will
16 likely decrease. Given the uncertainty regarding
17 the effects of climate change on precipitation,
18 Shell simulated forest fire using model inputs from
19 modelling constructed for the LARP, which
20 represents the best available knowledge at this
21 time. ^{351 Exhibit 001-051H, Adobe 21 and Adobe 66}

22

23 **Cumulative Effects**

24 Next I would like to talk about cumulative
25 effects, which, in Shell's view, is the most

1 important management and policy issue in the Oil
2 Sands Region. I've already touched on this issue
3 to a certain extent, but let me start by saying
4 that Shell conducted a cumulative effects
5 assessment in accordance with the requirements of
6 the CEAA and the guidance documents published by
7 the Canadian Environmental Assessment Agency.

8 These documents require that all
9 Environmental Assessments conducted under the CEAA
10 consider the likely effects of the proposed project
11 that overlap with the effects of other projects in
12 the area that have been, or will be, carried out.

13 The Joint Review Panel for the Express
14 Pipelines project set out a three-part test for
15 assessing cumulative effects under the CEAA, and
16 that panel stated as follows: And I quote (as
17 read):

18
19 "First, there must be an
20 environmental effect of the project
21 being assessed.

22 Second, that environmental
23 effect must be demonstrated to
24 operate cumulatively with the
25 environmental effects from other

1 projects or activities.

2 And third, it must be known
3 that the other projects or
4 activities have been or will be
5 carried out and are not
6 hypothetical." 352 NEB-CEAA Joint Review

7 Panel, Environmental Assessment of the Express

8 Pipeline Project: Joint Review Panel Report OH-I-95,

9 (May 1996) at 187-88

10

11 Therefore, in order for there to be
12 cumulative effects under the CEAA, there must be
13 overlap between the effects of the proposed project
14 and other activities. If there is no overlap,
15 there is no cumulative effect for the purposes of
16 CEAA.

17 Secondly, there must be some certainty that a
18 future activity will in fact be carried out for it
19 to be considered in the cumulative effects
20 assessment.

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

23

24 "Some probability rather than
25 the near possibility that the

1 cumulative environmental effect
2 will occur." ³⁵³ NEB-CEAA Joint Review Panel,
3 Environmental Assessment of the Express Pipeline
4 Project: Joint Review Panel Report OH-I-95, (May
5 1996) at 98

6
7 In addition, CEAA agency guidance states as
8 follows, and I quote (as read):

9
10 "When the details for future
11 projects, e.g. design, technology,
12 mitigation measures, are unknown,
13 or the information is not
14 accessible, it adds to the
15 uncertainty about the environmental
16 effects of future projects and how
17 these effects will interact with
18 those of the project in question.
19 Available information and the best
20 professional knowledge and judgment
21 should be used. In most cases,
22 only qualitative assessments of
23 cumulative environmental effects
24 will be possible." ³⁵⁴ CEA Agency,
25 *Reference Guide: Addressing Cumulative Effects*

1 (Ottawa: Federal Minister of Supply and Services
2 Canada, 1994), online:
3 <[Http://www.ceaa-acee.gc.ca/9742C481-21D8-4D1F-AB14-
4 555211160443/Addressing_Cumulative_Environmental_
5 Effects.pdf](http://www.ceaa-acee.gc.ca/9742C481-21D8-4D1F-AB14-555211160443/Addressing_Cumulative_Environmental_Effects.pdf)> at 140-141

6
7 In terms of activities that are induced by
8 planned projects, like access roads, the CEEA
9 Agency's guidance is that consideration of induced
10 actions should be done only if there is sufficient
11 information describing them to allow an adequate
12 assessment of their effects. ³⁵⁵ CEA Agency, "Cumulative
13 Effects Assessment Practitioners Guide" (February 1999) online:
14 <[Http://www.ceaa-acee.gc.ca/43952694-0363-4B1E-B2B3-47365FAF1ED7/Cumulative_
15 Effects_Assessment_Practitioners_Guide.pdf](http://www.ceaa-acee.gc.ca/43952694-0363-4B1E-B2B3-47365FAF1ED7/Cumulative_Effects_Assessment_Practitioners_Guide.pdf)> at 19

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

17 So Shell's witnesses explained during the
18 hearing that future activities, like seismic
19 exploration, were not included in the Planned
20 Development Case because there is no information
21 about these activities today. We don't know when,
22 where, or how these activities will be undertaken.
23 Therefore, there is no ability to predict with any
24 degree of certainty what their environmental
25 effects may be in the future. ³⁵⁶ Transcript Vol. 5, pg. 1051

1 However, for other future activities, like
2 announced in-situ projects where there was
3 insufficient information about the project, Shell
4 conservatively assumed that the entire lease for
5 the in-situ Project would be disturbed. ^{357 Transcript}
6 Vol. 5, pg. 1052 As that will clearly not be the case
7 for in-situ projects, Shell's approach
8 conservatively overestimates disturbance from these
9 types of projects. ^{358 Transcript Vol. 5, pgs. 1052-1053}
10 Mr. Dyer for OSEC acknowledged that Shell's Planned
11 Development Case was both conservative and
12 reasonable. ^{359 Transcript Vol. 8, pg. 1721}

13 The cumulative effects assessment that was
14 undertaken for the Project followed the
15 requirements of CEAA.

16 First, the environmental effects of the
17 Project were assessed.

18 Second, Regional Study Areas, or RSAs, were
19 developed that were considered by
20 discipline-specific experts to be the areas in
21 which the effects of the projects could overlap
22 with the effects of other activities in a
23 non-trivial way.

24 Finally, the effects of the Project were
25 considered in combination with the effects of other

1 projects or activities within the RSA that were
2 either existing or planned future activities.

3 360 Exhibit 001-001B, Adobe 21-22; Exhibit 001-051H, Adobe 5

4 At the request of the Panel, Shell assessed
5 cumulative effects from a Pre-Industrial baseline
6 and updated its Planned Development Case to include
7 all projects that had been announced as of
8 September 2011. ^{361 Exhibit 001-063} Shell's EIA
9 indicates that there will be no significant adverse
10 effects to species at risk or Key Indicator
11 Resources with the exception of cumulative effects
12 to woodland caribou and the black-throated green
13 warbler.

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

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

25 Shell acknowledges that the PDC information

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

10 Rather, this information is useful for the
11 purposes of informing regional planning and policy
12 development by regulators and government such as
13 LARP and the Panel should make the appropriate
14 recommendations to those bodies to consider Shell's
15 information in their planning and management
16 activities. ^{362 Transcript Vol. 8, pg. 1600}

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

25 Shell has been an active participant of CEMA

1 since its inception in 2000, as noted by Mr. Dyer
2 for OSEC, ^{363 Transcript Vol. 8, pg. 1728} and has continued
3 to maintain a strong leadership position. The LARP
4 is also intended to address regional concerns
5 through setting regional objectives and
6 quantifiable targets and setting aside new
7 conservation areas. In Shell's views, these are
8 the appropriate forums to address and manage
9 cumulative effects across the oil sands, and CEMA
10 is in fact taking steps to address these issues.

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

15 ^{364 Exhibit 001-070A, Adobe 16, 19 and 31}

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

18

19 **Uncertainty**

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

24 Uncertainty is inherent in any Environmental
25 Assessment. In its Operational Policy Statement on

1 Adaptive Management, the CEAA agency states as
2 follows, and I quote:

3
4 "Due to factors such as the
5 complexities of ecosystems and
6 difficulties predicting details of
7 future development, all
8 [environmental assessments] involve
9 some level of uncertainty regarding
10 the identification of environmental
11 effects, the assessment of their
12 significance, and the effectiveness
13 of mitigation measures. The
14 [**Canadian Environmental Assessment**]
15 **Act** implicitly recognizes
16 uncertainty by requiring a
17 follow-up program for all projects
18 that undergo an assessment by
19 comprehensive study or a review
20 panel." ³⁶⁵ CEA Agency, *Operational Policy*
21 *Statement: Adaptive Management Measures under the*
22 *Canadian Environmental Assessment Act* (March 2009)
23 online:
24 <[http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=](http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=50139251-1)
25 50139251-1> at 2

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This guidance reflects the fact that an Environmental Assessment is intended to make reasonable predictions about what is likely to occur in the future and not what is speculative. It does not and cannot be expected to predict all effects with certainty or finality. This was confirmed by the Federal Court of Appeal in **Alberta Wilderness Association v. Express Pipelines** when it held that, and I quote:

"... no information about the probable future effects of a project can ever be complete or exclude all possible future outcomes." ³⁶⁶ [1996] F.C.J. No. 1016 (Fed. C.A.) at para. 10

Uncertainty is managed through monitoring to verify predictions and implementing adaptive management if the actual effects are different from what was predicted. The Federal Government witnesses agreed with this approach. ³⁶⁷ Transcript Vol. 14, pgs 3500-3501

The Shell witnesses responded to Mr. Cooke's

1 questions by explaining that uncertainty is
2 something that is inherent in any development and
3 companies like Shell evaluate those uncertainties
4 and the risks associated with those uncertainties
5 as part of every decision they make. ³⁶⁸ Transcript
6 Vol. 8, pgs. 1622-1624

7 Shell's history in the Oil Sands Region, as
8 well as the extensive work that has gone into the
9 EIA for this Project, provide a high degree of
10 certainty that these types of risks can be managed
11 proactively. ³⁶⁹ Transcript Vol. 8, pgs. 1624-1626 The oil
12 sands industry has shown that when new challenges
13 present themselves, whether they be through new
14 regulatory requirements or new information from
15 environmental effects monitoring, the industry will
16 collaboratively work together to address this new
17 issue and will modify their operations as
18 necessary. ³⁷⁰ Transcript Vol. 8, pgs. 1629-1631 This strong
19 track record demonstrates that Shell will be able
20 to adaptively manage any outcome from the variety
21 of uncertainties that has been identified.

22 In short, Shell has managed uncertainty for
23 the Project through using conservative assumptions
24 and models in the Environmental Assessment,
25 validating those models, and in some cases

1 verifying those models based on actual monitoring
2 results, by developing comprehensive follow-up and
3 monitoring plans, committing to adaptive management
4 if monitoring shows different results from what the
5 EIA predicted, and participating in
6 multi-stakeholder industry groups such as CEMA and
7 COSEA to study and address these issues and
8 proactively work to resolve them.

9 Let me now turn to government recommendations
10 before I wind up the environmental section. This
11 is the final issue I'd like to address in this
12 area.

13

14 **Government Recommendations**

15 Mr. Chairman, several of the recommendations
16 from the Federal Government are not required for
17 the purposes of this process since most have been
18 addressed already on the record or are more
19 appropriately the subject matter of regional
20 multi-stakeholder initiatives such as the FiSH
21 Committee.

22 The purposes of a Fisheries and Oceans
23 Canada, Environment Canada, Natural Resources
24 Canada, and Transport Canada's participation in
25 this process is to provide advice to the Panel

1 pursuant to Section 20 of the CEAA. The advice is
2 to assist the Panel in determining whether there
3 are any likely significant adverse environmental
4 effects.

5 Shell provided its response to each Federal
6 Government recommendation in its Reply Submission
7 dated October 15th. And I would urge the Panel to
8 have a look at that submission carefully to
9 determine whether a proposed recommendation is
10 necessary to mitigate the environmental effects of
11 this Project.

12 And in conducting that review, Panel, let me
13 give you a simple test to evaluate the
14 recommendations that have been put forward. I
15 think you should ask yourself this first question:

16
17 "Is the recommendation
18 required to ensure that the Project
19 is not likely to cause a
20 significant adverse environmental
21 effect?"

22
23 That's the question you should ask yourself.

24 This assessment should consider the
25 assessment on the record. For many

1 recommendations, federal regulators have not
2 provided evidence to suggest they are required, or
3 have provided any nexus between the risk of a
4 significant effect and the recommendation itself.
5 They also have provided no evidence which would
6 contradict Shell's conclusions.

7 If the recommendation is not required to
8 ensure that the Project is not likely to cause a
9 significant adverse effect, it should not be
10 included in the Panel's report unless it is
11 directed to government or regulators to plan for
12 and manage regional issues.

13 And the second test you can apply in respect
14 of monitoring recommendations, you should ask
15 yourself this question:

16
17 "Is the level of uncertainty
18 such that there is a risk of a
19 significant adverse environmental
20 effect?" ³⁷¹ *Canadian Environmental Assessment*

21 *Act, 2012, S.C. 2012 c. 19 s. 52, s. 31(1) (a),*

22 Adobe 18

23
24 And if the answer to that question is "yes,"
25 then the monitoring to verify the prediction and

1 adaptively manage the issue is required, and the
2 recommendation should be required.

3 Finally, it is important to recognize that
4 Alberta already regulates many of these issues
5 through legislation and Shell's environmental **EPEA**
6 approval. And they do it very well. ^{372 Exhibit 001-001B,}
7 ^{Adobe 70} This Panel can - and should - rely on
8 Alberta's ability and constitutional right under
9 the law to regulate these matters.

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

13 First, many of the DFO's recommendations were
14 discussed with Mr. Makowecki during the hearing and
15 he agreed that several of the DFO recommendations
16 can be achieved through Shell's participation in
17 regional multi-stakeholder initiatives such as the
18 FiSH Committee. ^{373 Transcript Vol. 14, pgs. 3531 and 3534}
19 Specifically with respect to DFO recommendation
20 two, which recommends that Shell's No Net Loss Plan
21 include a minimum compensation ratio of 2:1, Mr.
22 Makowecki agreed that DFO will work with Shell on
23 its No Net Loss Plan and will consider a variety of
24 factors in determining the appropriate compensation
25 ratio, and that DFO's recommendation can be amended

1 to require Shell to aim for a 2:1 compensation
2 ratio as opposed to requiring a minimum 2:1
3 compensation ratio. ^{374 Transcript Vol. 14, pgs. 3532-3534}

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

10 Recommendation 1(b) was for Shell to identify
11 and implement measures that avoid the affects of
12 drawdown of the lenticular patterned fen and yellow
13 rail habitat during Project construction and
14 operations. ^{375 Exhibit 005-020, Adobe 65} Shell provided
15 information in response to IRs that outlined
16 potential mitigation measures to reduce drawdown of
17 the lenticular fen, including establishing a mine
18 setback or constructing an engineered mitigation
19 such as a barrier and pumping system. ^{376 Exhibit}
20 ^{001-009, Adobe 117} However, these mitigations are very
21 expensive and Shell concluded that they were not
22 required to avoid significant adverse environmental
23 effects. ^{377 Exhibit 001-051F, Adobe 97 and 117; Exhibit 001-070A,}
24 ^{Adobe 14} Environment Canada conceded that their
25 recommendation was provided based solely on

1 environmental concerns and did not consider other
2 factors such as cost or resource sterilization.
3 ^{378 Transcript Vol. 14, pgs. 3537-3538} In these circumstances,
4 Panel, the balance of the evidence is that this
5 recommendation is not necessary to avoid
6 significant adverse effects and monitoring will
7 show whether additional mitigation may be required
8 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. Environment
14 Canada was clear during the hearing that
15 Recommendation 1E was simply intended to suggest
16 that conservation allowances be considered as one
17 of a variety of tools in the mitigation toolbox.

18 ^{379 Transcript Vol. 14, pg. 3637} Again, Mr. Chairman,
19 conservation allowances are not needed here,
20 particularly given Alberta's land use planning
21 efforts under LARP.

22 Finally, Environment Canada's Recommendation
23 number 8C contemplates public disclosure of
24 Emergency Response Plans. ^{380 Exhibit 005-020, Adobe 93}
25 Emergency Response Plans are sensitive documents,

1 Mr. Chairman, and Shell cannot publicly disclose
2 these plans. But Shell will of course continue to
3 work with the Board to ensure that the Emergency
4 Response Plans for the Project are developed in
5 accordance with the Board's requirements. ^{381 Exhibit}
6 001-070A, Adobe 22

7 Let me now turn to the next primary or main
8 issue, which is Aboriginal consultation.

9

10 **ABORIGINAL CONSULTATION AND TRADITIONAL LAND USE**

11 One of the primary elements of Shell's
12 sustainable development policy is its ongoing
13 substantive involvement with its stakeholders and
14 neighbours that allows Shell to identify issues and
15 address them in a meaningful way. ^{382 Transcript Vol. 3,}
16 pg. 277, Exhibit 001-062, Adobe 47 Put simply, Shell's public
17 consultation program ensures that its Aboriginal
18 neighbours have input into its decisions.

19 ^{383 Transcript Vol. 3, pg. 277, Exhibit 001-062, Adobe 2, 14, 27, 38}

20 Mr. Chairman, I think the results of Shell
21 applying these principles to its daily operations
22 speak for itself. The Fort McKay First Nation,
23 Fort McKay Métis Local 63, Mikisew Cree First
24 Nation, and Chipewyan Prairie Dene First Nation,
25 all had concerns about the Project. ^{384 Transcript Vol. 3,}

1 pg. 279, 280 Shell worked hard to resolve those
2 concerns, and, through a collaborative and
3 consultative process was able to address those
4 concerns. Others have continuing concerns - and
5 Shell respects those concerns - but parties can and
6 do disagree about issues. It is then up to the
7 Panel to assess what the actual effects of the
8 Project are.

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

14 Section 35 of the **Constitution Act**³⁸⁵ *The*
15 *Constitution Act, 1982*, being Schedule B to the *Canada Act, 1982* (U.K.),
16 1982, c. 11 (the "Constitution Act") provides that the existing
17 Aboriginal and Treaty Rights of the Aboriginal
18 peoples of Canada are hereby recognized and
19 affirmed.³⁸⁶ "Aboriginal peoples" includes "Indians, Inuit, Métis and
20 other Aboriginal people". The term "First Nation" is generally used to
21 refer to an Indian band under the *Indian Act*, R.S.C. 1985, c. I-5
22 Aboriginal Rights are elements of a practice,
23 custom, or a tradition integral to the distinctive
24 culture of the Aboriginal group claiming the right.
25 ³⁸⁷ *R. v. Van der Peet*, [1996] 2 S.C.R. 507 at page 310 Treaty

1 Rights, by contrast, are those rights granted
2 through a Treaty between an Aboriginal group and
3 the Crown. For example, Treaty 8 granted the
4 signatories to the Treaty the right to hunt and
5 trap on unoccupied Crown land within the geographic
6 boundaries of the Treaty, subject to the Crown's
7 right to take up those lands. ³⁸⁸ Exhibit 006-013C, Adobe 9

8 It is important to recognize that Aboriginal and
9 Treaty Rights are held by a collective, they are a
10 right of the people in common and not individual
11 rights. ³⁸⁹ *R. v. Sundown*, [1999] 1 S.C.R. 393 at page 412

12 Aboriginal Rights and Treaty Rights are not
13 absolute and may be infringed if justified. Thus,
14 where an Aboriginal community can establish that it
15 has or is likely to have Aboriginal or Treaty
16 Rights in an area affected by a particular project,
17 the Crown will be required to demonstrate that any
18 infringement resulting from a project is justified.
19 The infringement of Aboriginal interests from an
20 activity does not arise from the project itself,
21 but, rather, from the government's approval of the
22 project pursuant to legislation and regulation.
23 And one of the factors in determining whether the
24 infringement is justified is whether the Aboriginal
25 group has been adequately consulted about potential

1 impacts of the project which is the subject of
2 government action.

3 The Supreme Court of Canada in **Haida**
4 established the basic principle for Aboriginal
5 consultation in Canada, namely, that the honour of
6 the Crown demands that government consult and
7 possibly accommodate the interests of Aboriginal
8 people when government conduct may infringe on
9 their Section 35 rights. ³⁹⁰ *Haida Nation v. British Columbia*
10 *(Minister of Forests)*, 2004 SCC 73 at para. 25 [*Haida*]

11 Similarly, in **Mikisew Cree v. Canada**, ³⁹¹ 2005
12 SCC 69 [*Mikisew*] the Supreme Court of Canada held that
13 the process by which lands taken up by the Crown
14 under Treaty 8 is dictated by the duty of the Crown
15 to act honourably and that includes the duty to
16 consult. And I give this by way of background to
17 help us understand the fulsomeness of consultation
18 in this Project.

19 Aboriginal Rights fall along a spectrum with
20 respect to their degree of connection to the land.
21 At one end of the spectrum are practices, customs
22 and traditions that are integral to the distinctive
23 Aboriginal culture and the group claiming the
24 right, such as religious ceremonies, language and
25 dialect, site-specific rights that are dependent on

1 the use of the land, such as harvesting, fishing
2 and trapping are somewhere in the middle of that
3 spectrum, and Aboriginal title being an
4 indefeasible-like interest in land is at the other
5 end of the spectrum. ³⁹² *Delgamuukw v. British Columbia*, [1997] 3
6 S.C.R. 1010, at para. 138

7 The scope of the Crown's consultation
8 obligation is proportionate to the strength of the
9 asserted right or title and the seriousness of the
10 impact on the proposed decision on the exercise of
11 traditional rights. ³⁹³ *Haida*, at para. 39

12 On the deeper end of the spectrum, the
13 Supreme Court of Canada has held that meaningful
14 consultation requires that the Crown (i) provide
15 those claiming the Aboriginal or Treaty Right an
16 opportunity to make submissions; (ii) permit those
17 claiming a right to formally participate in the
18 decision-making process; and (iii) provide written
19 reasons to show that Aboriginal concerns were
20 considered and to reveal the impact they had on the
21 decision. ³⁹⁴ *Haida*, at para. 44

22 Even when the duty to consult falls on the
23 deeper end of the spectrum, the Supreme Court in
24 ***Taku River*** held that the regulatory process can be
25 used to satisfy the duty to consult. ³⁹⁵ *Taku River*

1 *Tlingit First Nation v. British Columbia (Project Assessment Director)*, 2004

2 SCC 74 [Taku] Similarly, in ***Brokenhead Ojibway Nation***
3 ***v. Canada***, the Federal Court confirmed that when
4 determining whether and to the extent the Crown has
5 a duty to consult with Aboriginal peoples about
6 projects or transactions that may affect their
7 interests, the Crown may fairly consider the
8 opportunities for Aboriginal consultation that are
9 available within the existing processes for
10 regulatory or environmental review. ^{396 2009 FC 484 at}

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

15 The duty to consult, therefore, boils down to
16 sharing information with potentially affected
17 Aboriginal groups, providing opportunities for
18 those groups to review the information and provide
19 input to the decision maker, and for the decision
20 maker to consider Aboriginal concerns in making
21 their decisions.

22 The courts have been clear that the duty to
23 consult does not require a project proponent to
24 offer any particular form of accommodation to
25 Aboriginal groups, nor does it provide any

1 Aboriginal group with an effective veto over a
2 proposed project. ³⁹⁷ *Haida*, para's 47 to 49 Rather,
3 courts have held that the Crown's fiduciary duty to
4 Aboriginal groups must be balanced against its
5 responsibilities towards all Canadians and that the
6 decision maker should balance societal and
7 Aboriginal interests in making decisions that may
8 affect Aboriginal claims. ³⁹⁸ *Ermineskin Indian Band and Nation*
9 *v. Canada*, 2009 SCC 9; *Haida*, para 14

10 The hearing for this Project is part of the
11 consultation process. The hearing provided
12 opportunities for Aboriginal groups to submit
13 information on the nature and scope of their
14 Aboriginal or Treaty Rights in the Project area, as
15 well as the potential adverse effects on those
16 rights and Shell's plans to mitigate any such
17 effects. Under its Terms of Reference, the Panel
18 is required to consider this information in
19 determining whether the Project is likely to result
20 in significant adverse environmental effects.

21 ³⁹⁹ Exhibit 002-024, Adobe 12 The Panel is also required to
22 reference this information in its report. ⁴⁰⁰ Exhibit
23 002-024, Adobe 5

24 Turning to Shell's consultation for this
25 Project, Mr. Chairman, Shell's public consultation

1 process involved gathering input from communities,
2 individuals and groups, to identify and understand
3 issues and concerns, determining what can be done
4 to address their concerns and implementing
5 agreed-upon actions. ^{401 Exhibit 001-006A, Adobe 84} Shell
6 has placed extensive Consultation Logs on the
7 record for all Aboriginal groups that expressed an
8 interest in the Project and has made significant
9 efforts to provide those communities with
10 opportunities to participate in the planning of the
11 Project. <sup>402 Exhibit 001-006A, Adobe 100-196; Exhibit 001-057;
12 Exhibit 001-061</sup> Shell has been consulting with
13 Aboriginal communities in the Project area for more
14 than 15 years. ^{403 Transcript Vol. 3, pg. 282} For this
15 Project, Shell developed a Consultation Plan which
16 was approved by Alberta Environment in 2007.
17 ^{404 Transcript Vol. 4, pg. 524; Exhibit 008-001} This plan was
18 subsequently updated in 2010. ^{405 Exhibit 001-057, Adobe 13}
19 Shell consulted in accordance with this
20 Consultation Plan. It consulted with each
21 interested community to determine how that
22 community wished to be consulted and how they
23 wished to contribute to the Project. <sup>406 Transcript
24 Vol. 3, pg. 282</sup> Shell provided regular updates about
25 the Project and provided opportunities for

1 potentially affected groups to provide input and
2 express any concerns they might have. Communities
3 were also given opportunities to conduct
4 Traditional Land Use Studies. In addition, Shell
5 included Aboriginal representatives from
6 participating communities in the carrying out of
7 vegetation and wetlands, wildlife, fish and fish
8 habitat, and archaeological biophysical studies all
9 in support of the EIA. ^{407 Exhibit 001-001E, Adobe 91-92}

10 Notwithstanding Shell's generally strong and
11 positive relationship with Aboriginal communities
12 in the Project area, evidenced by the support of
13 the communities in closest proximity to the
14 Project, several of the identified Aboriginal
15 communities have expressed concern about the
16 Project. ^{408 Exhibit 001-006A, Adobe 92-96} Shell has
17 documented all of the engagements that have taken
18 place with each of these communities and has
19 summarized the issues, the issues discussed, and
20 the outcomes of those engagements. ^{409 Exhibit 001-006A,}
21 ^{Adobe 100-196; Exhibit 001-057; Exhibit 001-061}

22 Not all of the concerns that were raised by
23 Aboriginal communities related to project-specific
24 issues. Many of them dealt with cumulative effects
25 of regional development that were unrelated to this

1 Project. Or they related to capacity building for
2 the community that would allow the community to
3 participate more fully in future developments that
4 again were unrelated to this Project. For the
5 concerns that relate to this Project, Shell has
6 responded to those concerns and proposed
7 Project-specific mitigation measures. For the
8 broader issues that were raised that extend beyond
9 the scope of this Project, Shell has committed to
10 working with governments and other stakeholders to
11 address those concerns. ^{410 Exhibit 001-001A, Adobe 433}

12 Shell does not believe this proceeding is the forum
13 to address those concerns that extend beyond the
14 scope of the Project.

15 Let me now turn to Shell's record of
16 consultation with Aboriginal groups that were most
17 active in this proceeding.

18 First, with respect to ACFN, Shell has been
19 consulting with ACFN since the mid-1990s.

20 ^{411 Transcript Vol. 3, pg. 286} Shell had a number of
21 agreements with ACFN for both the Muskeg River Mine
22 and Jackpine Mine Phase I projects that seek to
23 mitigate the effects of those projects on the
24 community. ^{412 Transcript Vol. 3, pg. 286-287} On its existing
25 oil sands project, ACFN businesses have received

1 more than \$200 million in business from Shell.

2 413 Transcript Vol. 3, pg. 289 Shell has also invested
3 millions of dollars on cultural and community
4 initiatives in Fort Chipewyan. 414 Transcript Vol. 3, pg. 290

5 ACFN has suggested that consultation must be
6 meaningful. Shell agrees with that. But if
7 Shell's consultation with ACFN on this Project has
8 not been meaningful, I'm not sure what would be.
9 Shell has been consulting with ACFN on this
10 specific Project since 2006. The parties entered
11 into a Protocol Agreement in September of 2008 that
12 confirmed the process and core principles of
13 consultation for the Project. 415 Transcript Vol. 4, pg. 526

14 Consultation with ACFN has included meetings with
15 the Chief and Council, meetings with Elders,
16 meetings with the ACFN Industrial Relations
17 Committee, and consultants, and Open Houses in the
18 community of Fort Chipewyan. 416 Exhibit 001-062, Adobe 17-18

19 Shell funded an ACFN Traditional Land Use Study for
20 the Project in 2008. 417 Exhibit 001-062, Adobe 19 In 2009,
21 Shell funded ACFN's Technical Review of the Project
22 Application which resulted in ACFN providing more
23 than 300 technical questions to Shell, each of
24 which Shell responded to. 418 Exhibit 001-062, Adobe 19

25 Shell also funded an updated Traditional Land Use

1 Study for the Project in 2011 and again in 2012,
2 and ACFN's reviews of Shell's Draft No Net Loss
3 Plan, Shell's Muskeg River Diversion Alternative,
4 and Shell's Socio-Economic Impact Assessment.

5 419 Exhibit 001-062, Adobe 15, 17 and 19

6 Shell explained during the hearing that ACFN
7 input was incorporated into the Project in a
8 variety of ways, including the Muskeg River
9 Diversion Alternative, Shell's Reclamation Plans,
10 the No Net Loss Plan for the Project, monitoring
11 programs, and employment and contracting
12 opportunities. 420 Transcript Vol. 4, pgs. 489-495

13 Shell has summarized its engagement with ACFN
14 in the Consultation Logs for the Project, but has
15 also detailed ACFN's substantive concerns and
16 provided responses to those concerns. 421 Exhibit

17 001-026; Exhibit 001-039A through K; Exhibit 001-050; Exhibit 001-086;

18 Exhibit 001-093; Transcript Vol. 3, pgs. 461-462 Shell also
19 provided opportunities to ACFN and other groups to
20 review the Consultation Logs and provide input,
21 which was also recorded. 422 Transcript Vol. 4, pg. 503

22 Finally, since ACFN has entered into mitigation
23 agreements with project proponents for past oil
24 sands mines in the area, including the Muskeg River
25 Mine Expansion and Jackpine Mine Phase I, 423 Energy &

1 Utilities Board Decision 2004-009; Energy & Utilities Board Decision

2 2006-128 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. ^{424 Transcript Vol. 10, pg. 2214}

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
14 "The Athabasca Chipewyan

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

1 about that." ⁴²⁵ Transcript Vol. 1, pg. 94

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Simply put, Mr. Chairman, ACFN has provided thousands of pages of submissions in this proceeding and has participated throughout the regulatory review process, including commenting on the Panel's Terms of Reference, the Joint Panel Agreement, and the CEAA's agency Draft Consultation Plan. ⁴²⁶ Exhibit 008-001 Shell has attempted to work with ACFN to resolve their outstanding concerns, but let me be clear - this is not a dispute about consultation. This is a dispute about EIA methodology and ACFN simply not agreeing with the conclusions in Shell's assessment. In **Taku River**, the Supreme Court of Canada stated that, and I quote:

"Where consultation is meaningful, there is no ultimate duty to reach agreement. Rather, accommodation requires that Aboriginal concerns be balanced reasonably with the potential impact of the particular decision on those concerns and with

1 competing societal concerns."

2 *427 Taku River Tlingit First Nation v. British*

3 *Columbia (Project Assessment Director), 2004 SCC 74,*

4 para. 2

5

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

16 Let me turn now to Fort McMurray First Nation
17 468. Fort McMurray 468 has also been engaged from
18 a very early stage in this Project. Shell funded a
19 Traditional Land Use Study in 2006 which
20 demonstrated that the Project area is located at
21 the very northern fringe of their traditional
22 territory and that the vast majority of TLU sites
23 are much further to the south. ^{428 Exhibit 001-062, Adobe 39;}
24 Transcript Vol. 3, pgs. 292, 414-415 and 417 This was again
25 reflected in the maps that Fort McMurray 468

1 provided to Shell in December of 2011. ⁴²⁹ Exhibit
2 011-002

3 As Ms. Jefferson explained during the
4 hearing, Shell has repeatedly invited Fort McMurray
5 468 to provide additional traditional land use
6 information to demonstrate potential impacts of the
7 Project, but based on the information that has been
8 received to date, there is no potential for the
9 Project to significantly impact the TLU of that
10 community. ⁴³⁰ Transcript Vol. 3, pg. 415 Therefore,

11 Ms. Jefferson explained that Shell was not willing
12 to fund additional Traditional Land Use Studies for
13 Fort McMurray 468. ⁴³¹ Transcript Vol. 3, pg. 412

14 Panel, the Energy and Resources Conservation
15 Board in the original Muskeg River Mine approval
16 held that information specific to each Aboriginal
17 community is not required. ⁴³² Energy Resources Conservation

18 Board, Decision 99-2 for the Muskeg River Mine Application, page 14 In
19 this case, Shell relied on the TLU information from
20 other Aboriginal groups in the area that have far
21 more likelihood of being affected by this Project
22 as to the use of the area for the exercise of
23 Treaty 8 Rights which were common rights to all
24 signatories to the Treaty.

25 In addition, it is also important to note

1 that Fort McMurray 468 has not had its evidence
2 adopted in this proceeding, and has not provided
3 Shell and other parties with the ability to
4 question them or cross-examine their evidence. As
5 a result, Mr. Chairman, I suggest that Fort
6 McMurray 468 has been adequately consulted on this
7 Project and the exercise of its rights will not be
8 significantly impaired by this approval.

9 Next, the Métis Nation of Alberta has
10 participated in this proceeding both on its own
11 behalf and on behalf of several Métis Locals and
12 Métis individuals. In a January 25, 2012 meeting
13 with MNA Region 1, Shell was advised that Region 1
14 was pursuing a new mandate to give greater
15 representation to Métis Locals in regulatory
16 matters and that it would be intervening in Shell's
17 Project in part to pursue greater recognition from
18 the Crown for a Métis Consultation Policy. ^{433 Exhibit}
19 001-057, Adobe 96 However, it remains unclear whether
20 Métis Locals in the region intend to be represented
21 by the MNA Region 1 for the purposes of
22 consultation. The MNA Region 1 claims that it
23 represents all Métis in the region, but it does not
24 represent Métis Local 63 in this hearing, despite
25 the fact that Local 63 is the closest Métis Local

1 to the Project. ⁴³⁴ Transcript Vol. 12, pg. 2949 As late as
2 July of this year, Métis Local 125's position to
3 Shell was that the MNA did not represent them in
4 consultation and Shell should consult directly with
5 Métis Local 125. ⁴³⁵ Exhibit 010-020, Adobe 1 In addition,
6 the Locals and the MNA both claim to be Métis
7 rights-bearing communities. ⁴³⁶ Transcript Vol. 12, pgs. 2948
8 and ²⁹⁵¹ The Supreme Court of Canada in **R. v. Powley**
9 held that in order to demonstrate Métis rights, the
10 claimants must belong to an identifiable Métis
11 community with a sufficient degree of continuity
12 and stability to support a site-specific Aboriginal
13 Right. ⁴³⁷ 2003 SCC 43 at para. 12 Courts have subsequently
14 determined that to meet the test under **Powley**,
15 claimants must produce significant evidence
16 addressing each of these factors. ⁴³⁸ *Kane v. Lac Pelletier*
17 (*Rural Municipality No. 107*), 2009 SKQB 348 at para. 59
18 Mr. Chairman, it is not clear to Shell who of the
19 Métis Locals, the MNA, and the MNA Region 1,
20 constitutes an identifiable Métis community for the
21 purposes of the **Powley** test. This is all very
22 foggy, in the words of Mr. Cooke, and it seems
23 appropriate that in the absence of a Métis
24 Consultation Policy, Shell focused its consultation
25 on the Métis Locals which represent the Métis

1 individuals that actually have the potential to be
2 impacted by the Project. ^{439 Exhibit 001-062, Adobe 45;}

3 Transcript Vol. 4, pg. 675

4 Shell proceeded on the assumption that the
5 Métis had the rights they asserted. ^{440 Transcript Vol. 4,}

6 pg. 618 Shell's evidence is that it has consulted
7 with all potentially affected Métis communities and
8 the MNA Region 1 and has done so since 2007.

9 ^{441 Exhibit 001-070A, Adobe 63}

10 MR. PERKINS: Mr. Chairman, apparently, I
11 don't know about others in the room that may have
12 LiveNote, apparently there's a problem with it on
13 the staff side, but there's no problem in terms of
14 capturing what's being said in argument, so there's
15 not a transcribing problem, I should say, there's
16 just a LiveNote problem, so maybe the best thing to
17 do would be to continue and we could try to deal
18 with it at the lunch break.

19 THE CHAIRMAN: Yes, let's continue to your
20 next break, sir.

21 MR. DENSTEDT: Shell provided Project
22 information, including the EIA, Project Updates,
23 and Responses to Supplementary Information
24 Requests, to the MNA, MNA Region 1, Fort McKay
25 Métis Local 63, Fort Chipewyan Métis Local 125,

1 Conklin Métis Local 193, Chard Métis Local 214,
2 Willow Lake Métis Local 780, Fort McMurray Métis
3 Local 1935, and Fort McMurray Métis Nation Local
4 2020. ^{442 Exhibit 001-006; Exhibit 001-057; Exhibit 001-061}

5 Through preliminary consultation and concerns
6 raised, Shell was able to determine that Fort McKay
7 Local 63, Fort Chipewyan Local 125, and Fort
8 McMurray Local 1935, were the only Locals Métis
9 members whose Aboriginal Rights might be impacted
10 by the Project.

11 The first of these Locals, Fort McKay Métis
12 Local 63, has been represented by the Fort McKay
13 First Nation through its consultation office and
14 has been included in the traditional knowledge and
15 traditional land use initiatives completed by the
16 First Nation. ^{443 Exhibit 001-070A, Adobe 64} Métis Local 63
17 has removed its Statement of Concern along with the
18 Fort McKay First Nation and it is no longer
19 objecting to the Project. ^{444 Exhibit 009-009}

20 For the other two Locals, Shell provided
21 numerous opportunities for these Locals to
22 understand the potential adverse impacts of the
23 Project and to discuss their concerns so that they
24 could be addressed by Shell. Shell held dozens of
25 meetings with Métis Locals 125 and 1935 in which

1 Shell discussed the Project, provided updates on
2 the Project, and specifically to discuss Shell's
3 Draft No Net Loss Plan for the Project. ⁴⁴⁵ Transcript
4 Vol. 15, pgs. 3709-3719 Shell has Good Neighbour
5 Agreements with both of these Locals and has been
6 cooperatively working with both those Locals
7 through annual work plans. ⁴⁴⁶ Transcript Vol. 3, pg. 291
8 Shell has provided funding to both Locals to
9 collect traditional land use, including *The Mark of*
10 *the Métis* study that MNA Region 1 filed during the
11 hearing. ⁴⁴⁷ Exhibit 001-062, Adobe 46; Transcript Vol. 15, pg. 3723
12 Shell has responded to each of the concerns that
13 the Métis Locals have raised and those responses
14 are on the record. ⁴⁴⁸ Transcript Vol. 15, pg. 3722;
15 Exhibit 001-006A; Exhibit 001-057; Exhibit 001-060; Exhibit 001-061;
16 Exhibit 001-062; Exhibit 001-065; Exhibit 001-114
17 The relationship between Shell and these
18 Métis Locals has been and continues to be in
19 Shell's view, and in the words of the president of
20 Local 125, "very good." ⁴⁴⁹ Transcript Vol. 12, pg. 2950
21 Shell was only recently made aware that Locals 125
22 and 1935 might have outstanding concerns in respect
23 of the Project. ⁴⁵⁰ Transcript Vol. 4, pg. 661; Transcript Vol. 8,
24 pgs. 1605-1606
25 MNA Region 1's historian, Mr. Fortna,

1 repeatedly expressed concerns during his testimony
2 that consultation between Shell and the Métis was
3 not meaningful because capacity funding was not
4 provided to the MNA or Métis Locals to allow them
5 to meaningfully engage in the Project. ^{451 Transcript}
6 Vol. 13, pgs. 3061 and 3068 This testimony is incorrect,
7 Mr. Chairman. Since 2007, Shell has provided for
8 or committed to more than \$700,000 to Locals 125
9 and 1935 based on the needs identified by those
10 communities. ^{452 Transcript Vol. 15, pg. 3722} In addition,
11 the MNA Region 1 received in excess of \$80,000 in
12 funding from the CEAA agency to assist the MNA
13 Region 1 in its participation in a review of this
14 Project and the Pierre River Mine Project. ^{453 Exhibit}
15 002-021 Presumably this funding should have at least
16 been sufficient for the MNA Region 1 to conduct a
17 review of the Project Application. The MNA
18 Region 1 submission on October 1st contained
19 assumptions about water quantity, water quality,
20 and effects on McClelland Lake, which are
21 unsupported by any evidence and inconsistent with
22 the conclusions in Shell's EIA. ^{454 Exhibit 010-004A,}
23 Adobe 15; Exhibit 001-051F, Adobe 63-64; Exhibit 001-011, Adobe 8
24 Mr. Fortna conceded that these assertions were made
25 without considering any of Shell's evidence and

1 were based solely on the perception of community
2 members. ^{455 Transcript Vol. 13, pgs. 3061 and 3064} In addition,
3 in response to MNA Region 1's questions during the
4 hearing about capacity funding to review Shell's No
5 Net Loss Plan for the Project, the CEAA agency
6 specifically invited the Métis Locals to apply to
7 that agency for additional technical funding to
8 review the No Net Loss Plan for the Project in
9 February of 2011. ^{456 Exhibit 010-028, Adobe 3}

10 Finally, John Malcolm has sought to represent
11 the Non-Status Fort McMurray Band, the Non-Status
12 Fort McKay Band, the Clearwater River Paul Cree
13 Band No.175, and the Wood Buffalo Elders Society.
14 These groups were not allowed to file evidence in
15 the proceeding as their submissions were filed
16 after the submission deadline, but they provided
17 oral evidence at the hearing.

18 Despite the fact that these groups have been
19 determined by the agency and the Government of
20 Alberta not to have Aboriginal Rights for which the
21 duty to consult is owed, Shell consulted with these
22 communities and provided funding for an April 2008
23 study which included traditional land use
24 information from members of the Wood Buffalo Elders
25 Society for use in Shell's current oil sands

1 applications. ^{457 Exhibit 001-062, Adobe 45}

2 In summary, Mr. Chairman and Panel Members,
3 the evidence shows that Shell's engagement with all
4 Aboriginal communities with the potential to be
5 affected by this Project has been exemplary. Shell
6 has made reasonable and appropriate efforts to
7 engage with each of these Aboriginal communities
8 and has incorporated their input into Project
9 planning.

10 And that's a logical place for me to stop,
11 Mr. Chairman.

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

14 I misunderstood. Did you want a short break
15 now or lunch?

16 MR. DENSTEDT: It would be useful for us to
17 have a short break now and then my friends could
18 have the entirety of my argument before lunch.

19 THE CHAIRMAN: Ten minutes.

20

21 **(Brief Break)**

22

23 THE CHAIRMAN: We should take your places,
24 please.

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

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Aboriginal Traditional Land and Resource Use

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

The Registry contains numerous extensive assessments of TLU in this region, including assessments conducted by Shell and its consultants as well as by many of the Aboriginal groups and their consultants. ⁴⁵⁸ Exhibit 001-001E; Exhibit 001-022, Adobe 12

to 27; Exhibit 001-051G, Adobe 153; Exhibit 001-051R; Exhibit 001-006F, Adobe 39; Exhibit 001-088; Exhibit 001-006A, Adobe 95; Exhibit 001-017B; Exhibit 006-013I, Adobe 185; Exhibit 006-013I, Adobe 1; Exhibit 007-009; Exhibit 010-024; Exhibit 011-009

ACFN alone has filed several TLU studies specifically for this Project that were conducted by its consultants Fire Light and MSCS. Shell's assessment of potential effects of the Project on TLU relied on these studies, as well as on studies from other Aboriginal groups in the Project area such as the Fort McKay First Nation, and Métis Local 63, and the Mikisew Cree First Nation. Shell also relied on many other TLU studies from past projects in the area, including the Muskeg River Mine and the Jackpine Mine

1 Phase I. ^{459 Exhibit 001-001E, Adobe 245; Exhibit 001-051R, Adobe 8}

2 Shell conducted a traditional land use

3 assessment and a traditional land use Environmental

4 Setting Report for the Project in support of its

5 2007 EIA. ^{460 Exhibits 001-001E and 001-001J} Focusing

6 specifically on ACFN, TLU information was provided

7 by ACFN in 2008 and later updated in 2011 based on

8 an agreed-upon workplan with Shell. Shell filed

9 ACFN's Integrated Traditional Land Use Study for

10 the Project in April of 2011. ^{461 Exhibit 001-017B}

11 After receiving ACFN's updated information, Shell

12 provided a draft TLU assessment to ACFN for their

13 review. ACFN provided comments on that draft and

14 Shell responded to ACFN's comments in writing and

15 in a meeting in June of 2011. ^{462 Exhibit 001-057, Adobe 75,}

16 ^{78 and 80} In November of 2011, Shell filed its

17 Updated TLU Assessment together with a copy of

18 ACFN's concerns regarding the assessment. ^{463 Exhibit}

19 ^{001-022, Adobe 3-6 and 12-27} Shell's assessment concluded

20 that the updated traditional land use information

21 provided by ACFN and other groups was consistent

22 with the information that informed the EIA and

23 therefore the conclusions in the EIA remain

24 unchanged. ^{464 Exhibit 001-022, Adobe 18; Transcript Vol. 8, pg. 1520}

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.

3 ^{465 Exhibit 006-013I} Again, the ACFN TLU information
4 that was filed in 2012 was reviewed by Shell and
5 was found to be consistent with the conclusions in
6 Shell's EIA. ^{466 Transcript Vol. 3, pg. 436}

7 Shell also consulted with Métis Locals, as I
8 discussed earlier, to provide opportunities for
9 them to provide input into the Project including
10 providing information about Métis land and resource
11 use. Shell provided funding to Métis Local 125 in
12 2009 for a Traditional Land Use Study that has not
13 yet been completed. ^{467 Exhibit 001-070A, Adobe 64}

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. ^{468 Transcript}
20 ^{Vol. 15, pg. 3771-3773} Métis Local 63 was included in the
21 extensive Traditional Land use work that was done
22 with the Fort McKay First Nation and that was also
23 included in the Assessment, including the Fort
24 McKay Community-Specific Assessment that considered
25 the effects of the Project specifically on those

1 groups. ^{469 Exhibit 001-070A, Adobe 64; Exhibit 001-088}

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.

6 Shell examined the evidence provided by those
7 groups regarding the areas in which they exercised
8 Aboriginal Rights including hunting, fishing,
9 trapping, and other activities, and determined how
10 the Project would impact those areas. ^{470 Exhibit}

11 ^{001-039H, Adobe 3} This assessment considered how the
12 Project would affect the availability of resources
13 that are harvested by Aboriginal groups for their
14 continued use, as well as how the Project would
15 affect access to those resources. ^{471 Transcript Vol. 8,}
16 pg. 1493

17 The EIA concluded that during construction
18 and operation, the Project will result in a direct
19 loss of land for hunting, trapping, and plant
20 harvesting, for traditional land users,
21 particularly the six Registered Fur Management
22 Holders and their families. ^{472 Exhibit 001-001E, Adobe 274}

23 Given that information collected on traditional use
24 indicated almost no subsistence fishing within the
25 Project footprint, the EIA concluded that the

1 Project would not have a direct effect on
2 traditional fishing within the LSA. ^{473 Exhibit 001-001E,}

3 ^{Adobe 275} This conclusion was supported by Marvin
4 L'Homme-court's testimony where he said that nobody
5 really uses the portion of the Muskeg River that
6 crosses the Project. ^{474 Transcript Vol. 10, pg. 2261}

7 Overall, the EIA determined that the Project will
8 not prevent traditional land users from accessing
9 any areas in the region except within the Project
10 development area itself prior to site reclamation.
11 Combining the assessment of Project effects on
12 access with the assessed effects on terrestrial and
13 fish resources, the EIA determined that the Project
14 is not likely to have a significant effect on
15 traditional hunting and trapping, traditional plant
16 harvesting or traditional fishing within the
17 region. ^{475 Exhibit 001-022, Adobe 21}

18 Within the broader region, the EIA concluded
19 that the Project would result in a negligible to
20 low environmental consequence on the availability
21 of traditional resources in the RSA. ^{476 Exhibit 001-051R,}

22 ^{Adobe 31} For example, project-related disturbance
23 will affect less than 1.0 percent of the area of
24 ACFN's traditional territory. ^{477 Exhibit 001-070A, Adobe 52}

25 On a cumulative basis, roughly 11 percent of the

1 ACFN's traditional territory was considered
2 disturbed at Base Case, and the Planned Development
3 Case will increase that number to 13 percent.

4 478 Exhibit 001-051G, Adobe 155 Changes in access resulting
5 from Project activities will have negligible
6 environmental consequences at the LSA and the RSA
7 levels. 479 Exhibit 001-051R, Adobe 50

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

12 - Undertaking progressive reclamation
13 wherever practical;

14 - Facilitating access across the Project
15 area by trappers to their traplines;

16 - Providing compensation to trappers
17 directly affected by the Project as per industry
18 standards and past precedent;

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

24 - Actively participating in regional
25 multi-stakeholder planning and research initiatives

1 to address the long-term sustainability of
2 effective traditional land use, including the
3 Reclamation Working Group, and the Sustainable
4 Ecosystems Working Group;

5 - Continuing to consult with all
6 potential affected Aboriginal groups, including
7 Fort McKay, Mikisew Cree, ACFN, and the Métis
8 Locals; ^{480 Exhibit 001-001E, Adobe 464} and

9 - Implementing the mitigations outlined
10 throughout the EIA, as amended, to minimize effects
11 of the Project on the resources that are relied on
12 for traditional uses and activities.

13 Shell is also committed to providing a system
14 for cultural diversity awareness training for their
15 employees and contractors regarding respect for
16 traditional resource users, traplines, cabins,
17 trails and equipment. ^{481 Exhibit 001-001E, Adobe 464}

18 Mr. Chairman, through different initiatives,
19 Shell has shown a commitment to working with
20 Aboriginal groups to ensure that they can continue
21 to use the land and resources in a traditional way.
22 Shell has been successful in addressing the
23 concerns of the Chipewyan Prairie Dene First
24 Nation, and in reaching agreements with Fort McKay,
25 Fort McKay Métis Local 63, and MCFN to address

1 their concerns and has entered into similar
2 arrangements in the past with ACFN for the Jackpine
3 Mine Phase I. Shell has implemented initiatives to
4 minimize any Project-related impacts on traditional
5 land and resource use, and these have proven
6 effective as there will be negligible effects on
7 the availability of traditional resources at the
8 RSA level and changes in access to the LSA and RSA
9 levels. As a result, the Project is not likely to
10 have any significant impact on the users of those
11 resources.

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

19 Dr. Candler assessed impacts on ACFN TLU on
20 the basis of strong concerns for the most sensitive
21 individuals impacted by the Project. ^{482 Exhibit 006-013I,}
22 ^{Adobe 46} Dr. Candler was explicit that his assessment
23 was not an assessment of impacts on the entire
24 community. ^{483 Transcript Vol. 10, pg. 2409} His assessment
25 was that, if an individual ACFN member experienced

1 significant effects, that would be a significant
2 effect on the ACFN community, based on his
3 methodology. This is inconsistent with standard
4 environmental assessment practice that considers
5 significance from the broader community level, not
6 the individual. ⁴⁸⁴ Transcript Vol. 3, pg. 468 It is also
7 inconsistent with what was arguably the most
8 extensive Joint Review Panel of potential impacts
9 on traditional uses ever conducted in the country's
10 history. In the Final Report for the Joint Review
11 Panel for the Mackenzie Gas Project, that panel
12 stated as follows, and I quote:

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

1 significant in the broader
2 context." 485 Final Report of the Joint Review
3 Panel for the Mackenzie Gas Project, at pg. 102

4
5 The idea that there are degrees of importance
6 which must be considered when determining
7 significance under the CEAA has also been
8 acknowledged by the Canadian courts. In **Alberta**
9 **Wilderness Association v. Express Pipelines**, the
10 Court of Appeal stated as follows, and I quote:

11
12 "[T]he principal criterion
13 set out by the [CEAA] is the
14 "significance" of the environmental
15 effects of the project: That is
16 not a fixed or wholly objective
17 standard and contains a large
18 measure of opinion and judgment.
19 Reasonable people can and do
20 disagree about the adequacy and
21 completeness of evidence which
22 forecasts future results and about
23 the significance of such results
24 without thereby raising questions
25 of law." 486 (1996), 137 D.L.R. (4th) 177 at

1 para. 10 [Emphasis added.]

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Therefore, in considering whether adverse effects caused by the Project are likely to be significant, the Panel must ask itself whether any likely adverse environmental effects are significant in relation to the size and the scope of the environment in which the Project will be carried out and in the broader context of the long-term benefits of the Project.

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In addition, as I discussed earlier, Aboriginal and Treaty Rights are collective rights, not individual rights. Therefore, assessing impacts on a community's Aboriginal Rights on the basis of certain individuals does not reflect the legal nature of the rights potentially being affected. This is particularly true given that Dr. Candler's assessment relies primarily on a single trapline. And as Ms. Somers correctly noted in her testimony, commercial trapping rights are much different than Treaty Rights. ⁴⁸⁷ Transcript Vol. 10, pg. 2201

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The trapline relied on by Dr. Candler is also included in Fort McKay's traditional land use work, which suggests that traditional use by the most

1 proximate Aboriginal groups, who are not objecting
2 to the Project, also occurs on this trapline.
3 488 Transcript Vol. 11, pgs. 2501-2506 Furthermore, individual
4 or commercial impacts, like those on
5 Mr. L'Hommecourt's trapline, are dealt with through
6 Shell's trapper compensation program. Impacts on
7 ACFN's collective rights must be considered at the
8 community level.

9 Dr. Candler's assessment also suffers from
10 other methodological shortcomings. For example,
11 Dr. Candler explained that habitation sites could
12 represent different physical sites used for
13 habitation or they could represent multiple
14 references to the same site from different
15 interview participants. 489 Transcript Vol. 10, pg. 2395
16 For example, 25 habitation sites could mean
17 25 different cabins or it could mean one cabin that
18 25 different people visited over the course of
19 years. That makes no sense in attempting to assess
20 what the impact on the use of lands for traditional
21 purposes is. His study area also excludes the Wood
22 Buffalo National Park and other areas in the
23 vicinity of Fort Chipewyan that are used by ACFN
24 members. This overrepresents the effects of the
25 Project on ACFN traditional land use. Finally,

1 Dr. Candler estimated that about 10 percent of the
2 ACFN community uses the Project area,^{490 Transcript}
3 Vol. 10, pg. 2402 even though he could only confirm 12
4 ACFN members that reported using the area, and
5 Dr. Candler's assessment does not distinguish
6 between active frequent use of an area and one-time
7 users of the area.^{491 Transcript Vol. 10, pg. 2391}

8 The ACFN witnesses were asked if their use of
9 the Project area is unique. And they responded
10 that it was.^{492 Transcript Vol. 10, pgs. 2246-2247} However,
11 there's no evidence to support that conclusion.
12 When asked for a list of resources that have been
13 harvested in the Project footprint, the ACFN
14 witnesses did not identify any resources that do
15 not exist elsewhere throughout the region and
16 ACFN's traditional territory.^{493 Exhibit 006-029}

17 Furthermore, the ACFN traditional territory is
18 approximately 4.4 million hectares.^{494 Exhibit 001-051G,}

19 Adobe 155 Their consultation area is approximately
20 245,000 square kilometres or 24.5 million hectares,
21 an area nearly the size of Italy.^{495 Transcript Vol. 11,}

22 pg. 2587; Exhibit 006-029 Meanwhile, the entire ACFN
23 community is about 1,000 individuals,^{496 Transcript}
24 Vol. 9, pg. 1955 which includes a substantial number of
25 members living in places like Edmonton,^{497 Transcript}

1 Vol. 11, pg. 2487 which means that each ACFN individual
2 has in excess of 200 square kilometres to exercise
3 their rights.

4 The Project is also located roughly 150
5 kilometres south of ACFN's main reserve, outside of
6 ACFN's homeland area. The Project is already
7 surrounded by existing oil sands development,
8 which, according to ACFN's own depiction of
9 disturbance put forward by Dr. Komers, means that
10 the Project area itself is already disturbed and
11 not available for use. ACFN has characterized this
12 area as not being prime land. ^{498 Transcript Vol. 10,}
13 pg. 2195

14 ACFN's evidence supporting the Bennett Dam
15 inquiry suggests the ACFN TLU was focused on the
16 ACFN reserves near Fort Chipewyan prior to the
17 dam's construction only a few decades ago. During
18 that inquiry, one ACFN Elder testified that he had
19 never trapped off ACFN Reserve 201. ^{499 Exhibit 006-013H,}
20 Adobe 118 others testified that all their families'
21 needs were obtained exclusively from the reserve.
22 ^{500 Exhibit 006-013H, Adobe 120 and 132} ACFN's position during
23 that inquiry was that the Bennett Dam had changed
24 water flows to the Peace-Athabasca Delta and that
25 forced members to change their patterns of

1 traditional land use.

2 In addition, the area identified by the ACFN
3 as their homeland area is surrounded by parks and
4 conservation areas created under the LARP,
5 including the Richardson Backcountry area, which
6 was referred to as important use area by ACFN
7 members during the hearing. ^{501 Transcript Vol. 9, pg. 2002;}

8 ^{Exhibit 001-070S, Adobe 64, 84 and 96-97} There are no petroleum
9 and natural gas rights or forestry agreements in
10 that area. ^{502 Exhibit 001-099; Exhibit 001-100; Transcript Vol. 11,}

11 ^{pgs. 2489-2490} To suggest that this Project will
12 result in significant effects on the exercise of
13 the entire ACFN community's Aboriginal and Treaty
14 Rights is not supported by the facts.

15 With respect to the MNA, Mr. Fortna critiqued
16 Shell's assessment of likely effects of the Project
17 on TLU on the basis that it gave insufficient
18 weight to historic land use by Métis. His
19 submission presents a history of Métis families in
20 the general region of the proposed Project that
21 attempt to show that traplines currently held by
22 non-Aboriginal trappers such as RFMA #2331 were
23 previously held and used by Métis families.

24 ^{503 Exhibit 010-027} Mr. Fortna's approach to critiquing
25 the Shell EIA is problematic for two reasons:

1 First, the TLU assessment was done to
2 determine the Project's effects on current
3 traditional land uses, not historic ones. For
4 example, Mr. Fortna indicated that RFMA #2331,
5 which has been held by a non-Aboriginal trapper for
6 more than 20 years, was previously held by a
7 Mr. Ducharme, a Métis trapper. While the history
8 of the trapline's ownership is of interest for
9 historical reasons and potentially for a rights
10 claim, the fact remains that Mr. Ducharme no longer
11 holds the trapline and will not be affected by the
12 Project. Furthermore, while Mr. Fortna believes
13 the Shell EIA is lacking for failing to consider
14 the history of trapline ownership, he failed to
15 provide any specific evidence that RFMA #2331 is
16 being used by Mr. Ducharme or any other Métis
17 person for traditional activities.

18 Second, Mr. Fortna's emphasis on historical
19 use of the region by Métis is consistent with the
20 general thrust of the MNA Region 1 and Métis Locals
21 concern that they had been ignored by the Province
22 of Alberta in the government's consultation
23 guidelines and their desire to be treated more like
24 First Nations. Shell has never disputed that Métis
25 may have Aboriginal Rights in the Project area.

1 For the purposes of this Project, Shell assumed
2 that the rights existed and consulted with all
3 potentially affected Métis Locals and the MNA.
4 ^{504 Transcript Vol. 4, pg. 637} Again, evidence of historic
5 use does not demonstrate that any Métis
6 individuals' or communities' current use of the
7 land for traditional purposes will be affected by
8 the Project.

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

12 ^{505 Transcript Vol. 12, pg. 2961} However, also like ACFN,
13 the evidence does not support that conclusion.
14 While several of the MNA Region 1 witnesses
15 testified that they currently use lands in the
16 region for traditional purposes, all of these lands
17 are considerably to the north of the Project.
18 Similarly, the *Mark of the Métis* atlas that MNA
19 Region 1 filed during the hearing contains a
20 variety of maps showing Métis Local 1935
21 traditional land use sites, and with the exception
22 of a single moose-hunting site in the vicinity of
23 the Project, no other TLU sites in the LSA were
24 identified. ^{506 Exhibit 010-024, pgs. 94, 95, 98, 117, 127, 139 and}

25 ¹⁴⁷ For the Métis Local 125, like ACFN, their home

1 community of Fort Chipewyan is located roughly 150
2 kilometres north of the Project and is surrounded
3 by parks and conservation areas created under LARP.
4 While Shell's assessment assumed members of Local
5 125 used the Project area, there is no evidence to
6 suggest that this Project will result in
7 significant effects on the exercise of that
8 community's rights in the region.

9 Several communities also raised concerns
10 about land use in the vicinity of the proposed Red
11 Lake compensation lake. While the plans for this
12 lake are still being developed in conjunction with
13 regulators and Aboriginal groups, any terrestrial
14 disturbance effects are predicted to be negligible.
15 ^{507 Exhibit 001-064, Adobe 85} The purpose of the lake is to
16 create a healthy and functional lake that will be
17 used by fish, wildlife and traditional land users.
18 The fish community selected for the compensation
19 lake incorporated First Nations and Métis input to
20 identify species that were important to them as a
21 fisheries resource. ^{508 Exhibit 001-064B, Adobe 94}

22 Finally, the ACFN has requested that the
23 Project should not be approved until a traditional
24 land and resource use management plan or
25 traditional use plan for ACFN is put into place.

1 509 Transcript Vol. 10, pg. 2124 The traditional use plan
2 would identify the resources and associated
3 thresholds and criteria required to support the
4 practice of ACFN rights currently and into the
5 future. ^{510 Transcript Vol. 10, pg. 2109} ACFN witnesses
6 stated that developing this plan would take
7 approximately two years. ^{511 Transcript Vol. 10, pg. 2234}

8 So, Mr. Chairman, to be clear, Shell is not
9 opposed to ACFN's traditional land use plan
10 proposal. However, the traditional land use plan
11 is designed to manage cumulative effects throughout
12 the region, and as such, the development of this
13 proposal should involve governments and all of
14 industry. It should also take into account the
15 rights and traditional land uses of other
16 Aboriginal groups, not just the ACFN. This is a
17 considerable task, and the words of Ms. Nicholls,
18 has a lot of variables. ^{512 Transcript Vol. 10, pg. 2234}
19 While Shell is willing to participate along with
20 other industry participants to explore the
21 traditional land use concept, it has provided
22 extensive evidence on how Aboriginal traditional
23 and resource use was assessed for this Project and
24 why the Project will not result in significant
25 effects. In these circumstances, it would be

1 unreasonable to delay the approval of this Project
2 indefinitely until such time as the traditional
3 land use plan is finalized and put into place.

4 Two final and related issues are impacts of
5 the Project on Aboriginal culture and
6 socio-economic impacts on Aboriginal groups.

7

8 **Cultural Effects and Socio-Economic Effects on Aboriginal**
9 **Groups**

10 ACFN filed a review of the Socio-Economic and
11 Traditional Land Use Assessments for the Project in
12 February of 2010 which expressed concerns about
13 Shell's assessment of socio-economic and Aboriginal
14 Rights impacts on ACFN. ^{513 Exhibit 001-039H} Shell
15 provided detailed responses to that review in May
16 of 2011. ^{514 Exhibits 001-039I, 001-039J} Shell also
17 conducted a cultural effects assessment at the
18 request of First Nations who expressed concerns
19 that Shell had not addressed the cultural effects
20 information that was included in the studies
21 provided, and as well as the assessment of the
22 socio-economic impacts on Aboriginal groups.
23 ^{515 Exhibits 001-051R and 001-051S} Both of these assessments
24 were included in Shell's May 2012 Submission and
25 included Aboriginal community input from a variety

1 of sources including the consultations carried out
2 by Shell and studies and reports prepared by or on
3 behalf of the Aboriginal groups in the area.

4 516 Exhibit 001-051R, Adobe 6; Exhibit 001-051S, Adobe 9

5 The scope of Shell's assessments regarding
6 cultural effects and socio-economic impacts on
7 Aboriginal groups was provided to ACFN in August of
8 2011 at their request, and ACFN declined to
9 comment. 517 Exhibit 001-057, Adobe 80; Transcript Vol. 4, pg. 576

10 However, following submission of the assessments in
11 May 2012, ACFN raised concerns with the methodology
12 used. As a result, Shell provided funding to ACFN
13 to review this supplemental information, conduct a
14 gap analysis of the information available, and
15 collect supplemental cultural and socio-economic
16 information. 518 Exhibit 000-061, Adobe 1 ACFN filed their
17 review of these assessments in its October 1st
18 filing. 519 Exhibits 006-013I, 006-013K, Exhibit 006-013L, Exhibit

19 006-013M, Exhibit 006-013N, Exhibit 006-013O, Exhibit 006-013P, and Exhibit
20 006-013AA

21 The purpose of Shell's cultural effects
22 assessment was to take the cultural information
23 that Aboriginal groups had provided in their TLU
24 studies and provide an assessment of the cultural
25 effects of the Project. 520 Transcript Vol. 4, pg. 575;

1 Transcript Vol. 8, pgs. 1501-1502 Shell's cultural assessment
2 determined that the effects of the Project on
3 tangible and intangible elements of culture will
4 range from negligible to moderate. Many of the
5 effects were considered small, such as
6 Project-related effects to the availability of
7 land, availability of wildlife habitats, ability to
8 pass on traditional knowledge, and Project-related
9 effects on language retention, and increases in
10 non-Aboriginal population. The larger effects were
11 assessed to be Project-related effects to visual
12 aesthetics, which was in effect wilderness
13 character, and a sense of solitude. ^{521 Exhibit 001-051R,}

14 ^{Adobe 50} However, none of these effects were, in
15 Shell's view, considered to be significant.

16 With respect to Shell's assessment of the
17 socio-economic effects on Aboriginal groups,
18 Shell's assessment shows that Aboriginal people and
19 communities in the region lead many other
20 Aboriginal communities in the country in terms of
21 income, community well-being index, and housing
22 quality and quantity. However, Aboriginal
23 communities in the region continue to trail the
24 regional population as a whole in these indicators.

25 ^{522 Exhibit 001-051S, Adobe 63}

1 Shell recognizes that oil sands development
2 in general has contributed to a number of
3 socio-economic pressures on Aboriginal communities
4 such as increasing social stressors, psychosocial
5 effects, and pressures on local services and
6 infrastructures. ^{523 Exhibit 001-051S, Adobe 62-63}

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

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

18 For its part, however, Shell is committed to
19 taking a number of actions to minimize the stresses
20 and maximize the benefits from its Project on
21 Aboriginal communities. Those actions include:
22 Providing financial and inkind contributions for
23 local community social groups, education
24 institutions, and healthcare providers, supporting
25 Dene gatherings, Elder youth programs, language

1 retention initiatives, and video documentation of
2 traditional knowledge. It includes supporting
3 historical preservation initiatives such as the
4 Fort Chipewyan museum, working with industrial
5 relations corporations and employment coordinators
6 to identify and remove barriers to employment
7 wherever possible, and carrying out a
8 fly-in/fly-out program for workers living in Fort
9 Chipewyan which allows Aboriginal individuals to
10 continue to practice traditional living while
11 participating in the wage economy and avoid the
12 high costs of housing in Fort McMurray. ^{524 Exhibit}

13 001-001E, Adobe 450; Exhibit 001-051S, Adobe 64; Exhibit 001-051R, Adobe 46

14 ACFN hired several experts who submitted
15 reports addressing cultural and socio-economic
16 effects on the ACFN community. The first,
17 Dr. McCormack filed a detailed research report on
18 the ethno-history of the ACFN community and how the
19 ACFN culture has been impacted over time. ^{525 Exhibit}
20 006-013K, Adobe 1 During the hearing, Dr. McCormack also
21 challenged the approach that Shell took in its
22 cultural assessment. The second ACFN expert,
23 Dr. Larcombe, filed a narrative of encroachment
24 which explains various pressures on the ACFN
25 community through history and up to the present.

1 526 Exhibit 006-013L, Adobe 1 While this submission
2 discusses oil sands development generally, it does
3 not address any specific impacts from the Project.
4 Finally, Mr. MacDonald with the Firelight Group
5 filed a supplemental social, economic and cultural
6 effects submission for the Project to address
7 perceived gaps in the Shell Assessment. ^{527 Exhibit}

8 006-013M, Adobe 1 This report discussed cumulative
9 effects on the ACFN community over time and into
10 the future primarily based on the perceptions of
11 the ACFN community members.

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

18 Mr. Chairman, these criticisms are unfounded.
19 Shell's Cultural Assessment was led by a qualified
20 cultural anthropologist who has conducted dozens of
21 social impact assessments including for past
22 projects in the oil sands. ^{528 Exhibit 001-073, Adobe 119-127}

23 Also, in conducting its cultural and
24 socio-economic assessments, the authors drew on a
25 variety of sources including consultations carried

1 out by Shell with First Nations and Métis groups in
2 the regions, and reports that were prepared by the
3 First Nations themselves or by their consultants.
4 529 Exhibit 001-051R, Adobe 6; Exhibit 001-051S, Adobe 9 Furthermore,
5 Shell's Cultural Assessment focused on potential
6 effects of the Project. 530 Transcript Vol. 8, pg. 1503 It
7 was not intended to address cumulative impacts on
8 Aboriginal culture over time, which is beyond the
9 scope of an EIA for a single project.

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

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

1 the region which aim at helping Aboriginal
2 communities to maintain their social cohesion and
3 unique characteristics. ^{531 Exhibit 001-051R, Adobe 46-47}

4 Many of these initiatives have focused specifically
5 on the communities of Fort McKay, Fort Chipewyan
6 and Fort McMurray. ^{532 Exhibit 001-051R, Adobe 46-47} 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 its consultant, Firelight, OSEC, and the Regional
14 Municipality.

15

16 **SOCIO-ECONOMIC**

17 **Intensity of Development & Pressures on Municipal**

18 **Infrastructure**

19 To be clear, these issues are not specific to
20 the Project, but are broader issues associated with
21 oil sands development over the past several
22 decades. This is reflected in the fact that the
23 Regional Municipality is not opposing this Project,
24 but rather, is raising broader cumulative concerns
25 with the Provincial Government primarily in

1 relation to the availability of developable land,
2 transportation and traffic, and work camps.

3 533 Transcript Vol. 12, pgs. 2639 2777 In addition, many of
4 the socio-economic concerns raised by Chief Adam of
5 the ACFN, such as high food prices, are issues
6 common to many northern communities and are not
7 directly a result of the Project. 534 Exhibit 001-051S,

8 Adobe 30

9 Oil sands development has brought challenges
10 to the region. There's no doubt about that. But
11 it has also brought substantial benefits. The
12 Provincial Government has made a number of
13 investments in recent years to address many of
14 these concerns. 535 Exhibit 001-051G, Adobe 161 and 179-184

15 Socio-economic issues like affordable housing,
16 infrastructure, education and health care, are the
17 responsibility of the various levels of government.
18 Government, not industry, is best equipped to
19 respond to the social needs of the people allowing
20 businesses to do what they do best, which is to
21 provide economic opportunity and wealth to society.
22 The Joint Review Panel for the Muskeg River
23 Expansion Project confirmed that local
24 infrastructure and capacity are the
25 responsibilities of governments, not project

1 proponents, and that the panel did not have the
2 mandate to resolve pre-existing socio-economic
3 issues. ^{536 EUB/CEAA Joint Review Panel Report (EUB Decision 2006-128)}
4 (December 17, 2006) at pgs. 15 and 16 Having said that, Shell
5 works actively with various levels of government
6 and regional planning initiatives in funding
7 innovative solutions to resolve the regional issues
8 that have been raised in this proceeding.

9 ^{537 Transcript Vol. 3, pg. 297; Exhibit 001-001E, Adobe 471 and 490}

10 Shell also invests in the communities
11 affected by its operations. For example, Shell has
12 spent more than one billion dollars on Aboriginal
13 contractors and businesses in the Athabasca Region
14 in the last six years. ^{538 Transcript Vol. 3, pg. 301} Shell
15 has also spent millions of dollars on local
16 community infrastructure and programs like daycare
17 centres, health care, education and social
18 programs. ^{539 Transcript Vol. 3, pgs. 221-229} Finally, Shell
19 has entered into a Memorandum of Understanding with
20 the Regional Municipality that will allow Shell to
21 support the Municipality's efforts in addressing
22 regional socio-economic issues. ^{540 Transcript Vol. 3,}
23 pg. 297

24 In addition, the billions of dollars that
25 will be invested in capital expenditures for the

1 Project with result in direct benefits to the local
2 communities and the country through increased
3 employment, income, contractor revenue, and
4 government revenue. ^{541 Transcript Vol. 3, pg. 301, 302}

5 The bottom line is that Shell proactively
6 engages in the issues within its control. It has
7 supported and will continue to support community
8 initiative aimed at improving the quality of life
9 for residents in the region.

10 Let me talk briefly about a few specific
11 issues. The first being housing.

12

13 **Housing**

14 OSEC and ACFN have raised concerns regarding
15 supply and affordability. It is no secret that
16 housing in Fort McMurray is both expensive and in
17 short supply. ^{542 Exhibit 001-001E, Adobe 465} However, Shell
18 is doing what it can to mitigate potential effects
19 of the Project on housing. For example, Shell will
20 operate a construction camp for the duration of
21 construction for the Project which will include
22 recreation, health care and leisure facilities and
23 services, as well as a fly-in/fly-out approach for
24 transporting workers in and out of the region, thus
25 reducing the need for temporary housing in Fort

1 McMurray and taking pressure off the housing
2 market. ^{543 Exhibit 001-001E, Adobe 450, Transcript, Vol. 3, pg. 227}

3 During Project operations, Shell will abide by the
4 Regional Municipality's desire that operational
5 workers reside in the community as permanent
6 residents and it will not use an operations camp.

7 ^{544 Exhibit 001-001E, Adobe 461; Transcript Vol. 12, pgs. 2732-2733}

8 Government authorities continue working
9 towards addressing housing issues in the region.
10 Since 2007, the Government of Alberta has invested
11 more than \$50 million in affordable housing in the
12 region. ^{545 Exhibit 001-051G, Adobe 182} As well, several
13 planning initiatives have been completed or are
14 underway to make sufficient land available for
15 residential and other uses in the various
16 communities in the region, such as the Provincial
17 Government's commitment of \$241 million to develop
18 lands in the Parsons Creek and Saline Creek Plateau
19 areas. ^{546 Exhibit 001-051G, Adobe 182} The most significant
20 of these is a assigning of a Memorandum of
21 Understanding between the Province and the Regional
22 Municipality for the creation of an Urban
23 Development Subregion which will enable the
24 Municipality to keep pace with the demand for
25 residential, commercial, industrial, and

1 institutional land. ^{547 Exhibit 001-051G, Adobe 182}

2

3 **Education**

4 In terms of impacts on the school system,
5 Shell has voluntarily taken steps to address
6 various issues related to the education system in
7 the region. Examples include:

8 - Providing ongoing support for
9 e-learning in Fort McKay; ^{548 Exhibit 001-001E, Adobe 474,}
10 Transcript, Vol. 3, pg. 229

11 - Supporting other Aboriginal education
12 initiatives identified by schools in Fort
13 Chipewyan, Fort McKay and Fort McMurray;

14 - Supporting Keyano College through
15 financial donations including funding to open a new
16 campus in Fort Chipewyan; ^{549 Exhibit 001-001E, Adobe 474;}
17 Transcript Vol. 3, pg. 223

18 - Supporting Aboriginal scholarships
19 through contributions to the National Aboriginal
20 Achievement Foundation and environmental education
21 of Aboriginal students in the region;

22 - Bringing science and technology camps
23 and workshops to Fort Chip and Fort McKay through
24 ACTUA; ^{550 Exhibit 001-001E, Adobe 474, Transcript, Vol. 3, pg. 228}

25 - Delivering drilling rig and driver

1 training in Fort Chipewyan;
2 - Sponsoring delivery of the Building
3 Environmental Aboriginal Human Resources Program in
4 Fort Chipewyan; and
5 - Implementing environmental monitoring
6 programs and training to allow local workers to
7 take advantage of job opportunities available in
8 the oil sands industry. ^{551 Exhibit 001-001E, Adobe 474}

9

10 **Health Services**

11 Chief Adam's testimony also raised concerns
12 about health care. Shell acknowledges that health
13 care service providers in the region face a number
14 of challenges including difficulty in recruiting
15 and retaining health care professionals and the
16 need for additional regional health infrastructure.
17 However, progress has been made on a number of
18 fronts over the past few years in addressing these
19 challenges. Examples of this progress includes:

20 - An additional \$177 million in funding
21 that was provided to the Northern Lights Health
22 Region between 2007 and 2010 to address regional
23 health related growth pressures;

24 - Additional doctors that have been
25 recruited to the area, the fact that emergency

1 department wait times have been reduced, and
2 investments in regional health infrastructure that
3 have been made. ^{552 Exhibit 001-051, Adobe 161}

4 To further mitigate any impacts of its
5 operations on regional health services, Shell is
6 committed to the following:

7 - Establishing an onsite health care
8 facility at the Albian Village site that provides
9 24/7 onsite primary emergency and occupational
10 health service;

11 - Continuing to provide financial
12 contributions to the Northern Lights Health
13 Foundation where appropriate, including \$1.2
14 million to the Inner City Health Initiative;
15 ^{553 Transcript Vol. 3, pg. 222} and

16 - Working with other industrial
17 proponents to address the cumulative socio-economic
18 effects of their projects on the region. This
19 includes ongoing discussions with Alberta Health
20 Services about medical infrastructure and services
21 needs, and how industrial proponents might
22 contribute to addressing those needs. ^{554 Exhibit}
23 ^{001-001E, Adobe 481}

24 **Traffic**

25 Concerns were also raised about traffic in

1 the region and specifically traffic on Highway 63.
2 Shell has committed to taking a number of steps to
3 minimize Project effects on the local road network,
4 including the following:

5 - Using construction camps at the Project
6 site;

7 - Using the Albian Sands Aerodrome as the
8 primary conduit for transporting construction
9 workers;

10 - Busing Fort McMurray-based Project
11 workers on a daily basis; and

12 - Scheduling construction truck traffic,
13 including oversized loads, during off-peak hours.

14 555 Exhibit 001-001E, Adobe 489, 490

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

22 556 Exhibit 001-001E, Adobe 490; Exhibit 001-006D, Adobe 26-27

23 On the Province's part, there has been a
24 commitment to twin Highway 63 south of Fort
25 McMurray. A five-lane bridge across the Athabasca

1 River in Fort McMurray has been constructed. And
2 construction of interchanges at the intersections
3 of Thickwood Boulevard and Confederation Way with
4 Highway 63 were completed in 2011. ^{557 Exhibit 001-051G,}

5 Adobe 183

6 Lastly, the long-range planning for future
7 road improvements in the Wood Buffalo region
8 continues. The Alberta Oil Sands Sustainable
9 Development Secretariat, in cooperation with a
10 number of Alberta government departments and local
11 area municipalities, has developed the Athabasca
12 Oil Sands Area Comprehensive Regional
13 Infrastructure Sustainability Plan, CRISP, which
14 lays out the infrastructure requirements, including
15 highways, required for future scenarios in which
16 the Athabasca oil sand region produces six million
17 barrels per day of bitumen. ^{558 Exhibit 001-051G, Adobe 161}

18 In addition, a new advisory committee called the
19 Athabasca Oil Sands Area Transportation
20 Coordinating Committee has been created comprised
21 of municipal, provincial, and industry
22 representatives, who review and make
23 recommendations on current and future
24 transportation needs in the region. ^{559 Exhibit 001-051G,}

25 Adobe 183

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

5 **The Role of the Province and the Region**

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

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

17 \$30 million to support the lower town site
18 water collection system upgrader.

19 \$15 million for regional landfill
20 development.

21 \$33.4 million for the Keyano Sports and
22 Wellness Centre.

23 \$54 million for the Wood Buffalo Housing and
24 Development Corporation.

25 \$10 million plus land for the construction of

1 the south cell block and station.

2 And they've contributed another \$52 million
3 for Phase I of the new RCMP Detachment in
4 Timberlea. ^{560 Exhibit 001-051G, Adobe 161, 179-184}

5 Further, while the region may be experiencing
6 rapid growth and its accompanying pressures, it is
7 also experiencing unprecedented tax-base growth.
8 Property assessment in the Rural Service Area of
9 the Regional Municipality, which consists mostly of
10 oil sands facilities, grew by an average of
11 24 percent per year from under \$6 billion in 2005
12 to more than \$24 billion in 2011. ^{561 Exhibit 001-051G,}

13 ^{Adobe 183} For its part, the Project will contribute
14 for annual property tax payments estimated at
15 between 23 and 34 million dollars, assuming current
16 rates, while Project-related activities will have
17 minimal effect on municipal costs. ^{562 Transcript Vol. 3,}

18 ^{pg. 301} These property tax payments will be in
19 addition to the more than \$50 million in annual
20 property taxes already paid by Shell for its
21 existing facilities in the region. ^{563 Exhibit 001-001E,}

22 ^{Adobe 493}

23 During its presentation to the Panel, the
24 Regional Municipality emphasized its 20-year
25 Municipal Development Plan and the various

1 initiatives it is taking to respond to issues in
2 its communities, including moving forward with
3 investments of upwards of \$2 billion in such things
4 as its downtown redevelopment and transit corridor.

5 564 Transcript Vol. 12, pgs. 2645, 2666 and 2752 The Municipality
6 also demonstrated that it is attempting to engage
7 with its provincial counterparts on priority issues
8 such as land availability and transportation,
9 though it expressed concerns with the Province's
10 lack of responsiveness. 565 Transcript Vol. 12, pgs. 2738 and

11 2755-2763 While shortfall may remain, the
12 Municipality, the Province and Shell, are all
13 taking steps to address these regional issues.

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

18

19 **PROJECT OPERATIONS**

20 Let me first talk about tailings.

21 **Tailings**

22 The first of these issues is tailings
23 management. In 2009, the ERCB released *Directive*
24 *074*, which requires all oil sands mining operations
25 to capture a minimum percentage of fine tailings

1 and ensure that tailings disposal areas achieve a
2 minimum undrained shear strength of 5 kilopascals
3 within a year of deposit and 10 kilopascals within
4 five years of deposit. ⁵⁶⁶ Energy Resources Conservation Board,
5 *Directive 074: Tailings Performance Criteria and Requirements for Oil Sands*
6 *Mining Schemes* (February 2009), Adobe 4-5 This will ensure that
7 tailings disposal areas have the strength,
8 stability and structure necessary to establish a
9 trafficable surface within five years after active
10 deposition has ceased.

11 In December 2010, Shell received approval for
12 its ERCB *Directive 074* compliant Jackpine Mine
13 Tailings Management Plan. The plan included
14 detailed information on the management of tailings
15 in the Jackpine Mine - Phase I Project area,
16 including the construction and operation of sand
17 cells, dedicated drying areas, densification, and
18 the start-up and operation of end pit tailings
19 using non-segregated tailings technology.

20 This plan includes the use of tailings
21 thickeners which have not achieved expected solids
22 content in the fine stream to date at the existing
23 Jackpine Mine, but this will be upgraded through a
24 project that Shell is currently in the process of
25 implementing. ⁵⁶⁷ Transcript Vol. 7, pgs. 1262-1263 The plan

1 also includes the use of atmospheric fines drying
2 which has been used successfully at Shell's
3 existing operations, and centrifuge technology
4 which is currently being demonstrated at the
5 commercial scale. ^{568 Exhibit 001-051E, Adobe 122} Shell has
6 provided detailed information to the Panel
7 describing how the expansion tailings management
8 plans align with existing approved plans to ensure
9 continued compliance with *Directive 074*.

10 Shell has continued to actively collaborate
11 with other industry participants through
12 initiatives such as the Oil Sands Tailings
13 Management Framework that is currently under
14 development in a collaborative effort between ESRD
15 and CAPP industry members and COSIA. ^{569 Transcript}
16 Vol. 3, pg. 248 and 276 Shell has also played a proactive
17 role in the formation of the Oil Sands Tailings
18 Consortium, or OSTC, whose members include the
19 seven primary oil sands mining companies who
20 together have invested approximately \$500 million
21 into tailings research and new tailings technology.
22 In 2011, OSTC companies dedicated \$75 million to
23 support additional tailings research. ^{570 Transcript}
24 Vol. 3, pg. 273 These efforts will lead to continued
25 improvements in tailings technology and will ensure

1 that the entire industry works together to share
2 successes and address this important industry-wide
3 issue.

4 A specific issue with respect to tailings
5 management for this Project related to the
6 placement of mature fine tailings, or MFT, into end
7 pit lakes. This was a feature of Shell's original
8 application but was raised as a key concern by most
9 Aboriginal groups. ^{571 Transcript Vol. 3, pg. 240-241} Shell's
10 Muskeg River Diversion Alternative involves
11 removing all MFT from end pit lakes, which requires
12 a combination of centrifuges in conjunction with
13 in-pit placement of NST. ^{572 Exhibit 001-015A, Adobe 25}
14 While removal of MFT from pit lakes will certainly
15 improve pit lake water quality from that of a lake
16 with MFT, outstanding concerns about final
17 distribution of process-affected water from the
18 centrifugation process into end pit lakes was also
19 raised at the hearing. When questioned on this,
20 experts from Natural Resources Canada confirmed
21 that Shell's plans for managing this remnant water
22 in the end pit lakes was an appropriate method.
23 ^{573 Transcript Vol. 14, pgs. 3564-3565}

24

25 **Bitumen Recovery**

1 The Board staff also asked questions of
2 Shell's track record regarding bitumen recovery in
3 relation to the Board's Interim Directive 2001-7.
4 Shell acknowledged that historically there have
5 been challenges meeting the bitumen-recovery
6 targets at the Muskeg River Mine. This is an issue
7 that Shell is currently working through with the
8 Board and that Shell is taking steps to address.
9 Mr. Mayes detailed all these changes during the
10 hearing. ⁵⁷⁴ Transcript Vol. 7, pgs. 1226-1230; Transcript Vol. 8,
11 pgs. 1569-1572

12 The Jackpine Mine was designed to incorporate
13 several improvements over the Muskeg River Mine
14 design in terms of bitumen recovery, including a
15 longer conditioning pipeline, primary separation
16 cell design improvements such as improved feed
17 distribution, and froth underwash and increased
18 flotation capacity. ⁵⁷⁵ Transcript Vol. 3, pg. 237

19 These design improvements have resulted in
20 improved performance relative to the Muskeg River
21 Mine, and according to Mr. Mayes, Shell's current
22 data indicates that the Jackpine Mine is expected
23 to exceed the ID 2001-7 requirements for 2012.
24 ⁵⁷⁶ Transcript Vol. 8, pg. 1572

25 Shell is also planning further capital

1 investments over the next several years to further
2 improve bitumen recovery, and the Project will
3 benefit from those investments. ^{577 Transcript Vol. 8,}
4 pgs. 1572-1573

5 In summary, Shell has committed to complying
6 with the Board's bitumen recovery targets and its
7 recent success at the Jackpine Mine demonstrates
8 its ability to perform in this regard.

9

10 **Solvent Recovery**

11 A further operation issue is solvent
12 recovery. In extracting bitumen from the oil
13 sands, Shell first uses hot water and then applies
14 a froth treatment which includes a solvent which
15 separates the bitumen from other constituents.
16 ^{578 Transcript Vol. 4, pg. 539} The froth treatment tailings
17 are processed in the tailings solvent recovery
18 unit, or TSRU, to recover more than 99 percent of
19 the solvent and to comply with ERCB criteria of
20 limiting solvent losses to less than four parts per
21 thousand parts of bitumen produced by volume.

22 ^{579 Transcript Vol. 4, pg. 541} For this Project, Shell has
23 committed to not discharge any untreated TSRU
24 tailings during plant operations. ^{580 Exhibit 001-113,}

25

Adobe 2

1 Solvent recovery performance is an area where
2 the Muskeg River Mine had difficulties in its
3 earlier years due to equipment reliability issues,
4 but since 2008, all of Shell's oil sands operations
5 have been fully compliant with the Board's solvent
6 recovery requirements. ^{581 Transcript Vol. 4, pg. 543; Transcript}

7 Vol. 8, pg. 1567 In addition, to the extent that
8 solvent reaches Shell's tailings ponds,
9 Mr. Martindale explained that Shell has conducted
10 testing for two years to determine whether solvent
11 in the tailings ponds could have adverse effects on
12 waterfowl that come into contact with it, and it
13 has not identified any adverse effects. ^{582 Transcript}
14 Vol. 4, pgs. 587-588

15 During the hearing, Board counsel asked
16 questions regarding the placement of discharge from
17 the TSRU tailings piping into the tailings ponds.
18 For the Muskeg River Mine, Shell was originally
19 required to discharge the TSRU tailings in a
20 subaqueous manner a minimum of three metres below
21 the surface of the tailings pond. ^{583 Transcript Vol. 7,}

22 pg. 1366 This is also the method of discharge that
23 Shell is applying for in this Project Application.

24 ^{584 Exhibit 001-001A, Adobe 204; Exhibit 001-051, Adobe 136}

25 Subaqueous discharge was imposed as an

1 approval condition in the Muskeg River Mine as a
2 result of concerns from the Fort McKay First Nation
3 that surface discharge of the TSRU tailings would
4 cause increased odour emissions. ^{585 Transcript Vol. 7,}
5 ^{pg. 1366} Compliance with this approval condition
6 however resulted in operational challenges such as
7 ice formation at the surface and freezing in the
8 tailings piping. ^{586 Transcript Vol. 7, pg. 1366} Shell
9 conducted trials in 2010 with tailings discharge
10 subaerially on to exposed tailings beach and these
11 trials identified no discernible increases in odour
12 emissions. As a result, Shell, with the support of
13 Fort McKay, applied to the Board for approval of
14 subaerial discharge of its TSRU tailings and this
15 was approved in 2011. ^{587 Transcript Vol. 7, pg. 1367}
16 Monitoring of odour emissions from the Muskeg River
17 Mine tailings ponds will occur for several years to
18 confirm that subaerial discharge is not causing
19 odour problems at site or at Fort McKay. If this
20 monitoring confirms that subaerial discharge is
21 successful, Shell will apply to the ERCB for
22 subaerial discharge arrangement for the Jackpine
23 Mine as well. ^{588 Transcript Vol. 8, pg. 1538}

24

25 **Asphaltene Rejection**

1 The issue of asphaltene rejection was also
2 raised during the hearing. Asphaltene rejection is
3 the mechanism in the paraffinic froth-treatment
4 process that removes water and fine solids
5 contaminants from bitumen. The extent of
6 asphaltene rejection affects the extent of
7 contaminant removal and thus the higher rate of
8 asphaltene rejection, the higher quality of bitumen
9 produced. At its existing operations, the current
10 design basis for the high temperature
11 froth-treatment process is to reject less than
12 10-weight-percent asphaltene based on bitumen
13 production on an annual basis. ^{589 Exhibit 001-009, Adobe 40}
14 During the hearing, Shell accepted that same limit
15 for this Project. ^{590 Transcript Vol. 7, pg. 1288}

16 In terms of lease boundary issues, which were
17 raised by Syncrude in submissions leading up to the
18 hearing, as well as by Board counsel during
19 cross-examination, Shell has committed to working
20 with all adjacent leaseholders to address any lease
21 boundary issues that may arise. ^{591 Transcript Vol. 3,}
22 pgs. 297-298 Shell currently has cooperation
23 agreements with both Syncrude and Imperial and is
24 working with those companies to coordinate
25 reclamation and watershed drainage. ^{592 Transcript Vol. 3,}

1 pgs. 297-298 To the extent that issues cannot be
2 resolved between the parties, disputes will be
3 brought to the ERCB for adjudication. ^{593 Exhibit 001-071}

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 ^{594 Transcript Vol. 7, pg. 1252} Shell has now applied for
12 this modification separate from this Project
13 Application as part of its *Directive 074* filings,
14 which have yet to be approved by the Board. Based
15 on its existing approval conditions for the
16 Jackpine Mine, Shell will work with adjacent
17 leaseholder Syncrude to reach an agreement on the
18 appropriate design and setbacks for this
19 modification of the south tailings disposal area,
20 which minimizes ore sterilization and forms the
21 basis of a final submission to the Dam Safety
22 Branch of ESRD and to the ERCB. ^{595 Transcript Vol. 8,}
23 pg. 1550

24

25 **Cell 2A and Geological Risks**

1 The next issue relates to Devonian risks and
2 Cell 2A that occurred at the Muskeg River Mine in
3 October of 2010. This was an incident that ACFN
4 asked a number of questions about and they
5 expressed concerns about the risk of a similar
6 event occurring for the proposed Project.

7 ^{596 Transcript Vol. 4, pg. 550} In his response to ACFN's
8 questions, Mr. Mayes explained that the Cell 2A
9 incident was the first event of its kind in the oil
10 sands' 45-year history of large-scale mining in
11 eight different mine pits. ^{597 Exhibit 001-077, Adobe 1}
12 Mr. Mayes also explained that despite the fact that
13 Cell 2A was an entirely unforeseen occurrence, it
14 was effectively contained to the mine pit and at no
15 time was there any release or any threat of a
16 release to a surface watercourse. ^{598 Exhibit 001-077,}

17 Adobe 1

18 As a result of the Cell 2A incident, Shell
19 has committed to carrying out geological surveys at
20 its current mines to develop a complete
21 understanding of the Devonian geology in the area
22 so that Shell can identify areas of potential risk
23 within the Muskeg River Mine and Jackpine Mine
24 footprints. ^{599 Transcript Volume 6, pg. 1200, 1201, Exhibit 001-077,}

25 Adobe 1

1 Shell has also developed a process for
2 assessing and managing any risks that are
3 identified. ^{600 Transcript Volume 6, pg. 1201} If the Project
4 is approved, Shell is committed to carrying out
5 this same risk assessment for the Project to ensure
6 that the likelihood of an event such as Cell 2A is
7 remote in the future. ^{601 Transcript Volume 6, pg. 1201}

9 **Accidents and Malfunctions**

10 The final operations issue I would like to
11 briefly touch on is the issue of accidents and
12 malfunction.

13 Shell provided details about a variety of
14 potential accidents and malfunctions and the likely
15 environmental consequences of each in its response
16 to the Panel's Supplemental Information Request 33
17 in May of 2012. ^{602 Exhibit 001-051E, Adobe 93} None of the
18 potential scenarios were concluded to be likely.

19 ^{603 Exhibit 001-051E, Adobe 95 and 98-104}

20 The Sierra Club Prairie has focused their
21 intervention on the safety of tailings pond dams
22 and ensuring that these do not fail. Mr. Roberts
23 explained during the hearing that a tailings dam
24 failure would be very serious, and as a result,
25 huge efforts are in place to ensure that failure

1 does not occur. ^{604 Transcript Vol. 6, pgs. 1096-1099} These
2 efforts include designing dams to meet Canadian Dam
3 Safety Association Guidelines, and the Mining
4 Association of Canada's Tailings Management
5 Protocols, conducting regular independent audits,
6 and monitoring dam stability on a 24/7 basis.

7 ^{605 Transcript Vol. 6, pgs. 1097-1099} Based on these measures,
8 a tailings dam failure was concluded to be remote.

9 ^{606 Exhibit 001-051E, Adobe 99}

10

11 **CONCLUSION**

12 Mr. Chairman, in conclusion, Shell's evidence
13 is that there is not likely to be any significant
14 environmental effects caused by this Project that
15 cannot be mitigated. The benefits of this Project
16 to local communities, Alberta and Canada are
17 significant, and the negative effects, most of
18 which are regional issues, can all be managed with
19 the initiatives that are already in place or that
20 are underway and which Shell is committed to
21 supporting.

22 We ask that you approve the Project as the
23 ERCB and as the CEAA Joint Review Panel, we ask
24 that you recommend that this Project is not likely
25 to cause any significant adverse environmental

1 effects that cannot be mitigated.

2 Based on the evidence before the Panel, Shell
3 urges the Panel to approve the Project.

4 Mr. Chairman, you and the other Panel Members
5 can be confident that Shell's Expansion is in the
6 public interest and that it will continue to be a
7 leader in the development of this world class oil
8 sands resource.

9 Thank you for your time and attention over
10 the last three weeks.

11 Particularly, I would thank the Court
12 Reporter for her incredible patience with me this
13 morning.

14 And if there are any questions, I'm happy to
15 give it a try.

16 THE CHAIRMAN: We have no questions,
17 Mr. Denstedt. Thank you.

18 MR. DENSTEDT: Thank you, sir.

19 THE CHAIRMAN: We'll take our lunch break
20 and resume at 2:00 p.m. It would be helpful to the
21 Panel if counsel could huddle with Mr. Perkins and
22 prepare a rough schedule for the balance of the
23 argument so we know how to plan. Thank you.

24

25

(The Luncheon Adjournment)

1 **(The Hearing Adjourned at 1:00 p.m.)**

2 **(The Hearing Reconvened at 2:00 p.m.)**

3

4 THE CHAIRMAN: Good afternoon, everyone.

5 Thank you for your estimates. So we have a time
6 management problem, but we'll proceed and take a
7 reading at about 5 o'clock and decide what to do.
8 In the meantime, I've asked our reporter,
9 Ms. Nielsen, to feel comfortable in advising if
10 anyone's going at too great a clip, so you can
11 expect that.

12 Mr. Roth for Syncrude.

13

14 **FINAL ARGUMENT OF SYNCRUDE CANADA LTD., BY MR. ROTH:**

15 MR. ROTH: Good afternoon, Mr. Chairman,
16 Members of the Panel. I have, or actually
17 Ms. Ladha of our firm has e-mailed to the court
18 reporter a copy of our argument and I plan to stick
19 to it very closely. However, what I would request,
20 if it is acceptable to the Panel, I think the same
21 as what Mr. Denstedt requested, that footnotes,
22 references to the footnotes -- Ms. Ladha has been
23 here over the past couple of weeks and did a very
24 diligent job in footnoting and referencing my
25 argument. And what's she's also done is put some

1 headings. And I'd ask that those appear in the
2 transcript as well, if that's acceptable to the
3 Panel.

4 THE CHAIRMAN: It is, sir.

5 MR. ROTH: Mr. Chairman, I was happy to
6 get Mr. Perkins's letter on Friday providing an
7 issues list for final argument. I had not yet
8 started to draft argument, and Mr. Perkins's list
9 provided me with a very useful structure for
10 argument. Not only did Mr. Perkins provide me with
11 the structure for my final argument, but as you
12 will hear, when I get into the substance of some of
13 the issues I will address, I'll be relying on his
14 cross-examination for clarity that it brought to
15 the record on the principal issue that brought
16 Syncrude to this hearing.

17 Before I get to the issues list, however, I
18 would like to discuss the two core regulatory
19 principles that underlie Syncrude's argument on
20 each issue that I will address today.

21 The first is the principle of equity. Equity
22 underpins why the ERCB has a public hearing mandate
23 that is being fulfilled through this Joint Review
24 Panel process. Equity demands that if a person's
25 rights could be directly and adversely affected by

1 a regulatory decision, that person has the right to
2 be heard. They also have the right to be provided
3 with notice as to how their rights may be affected.

4 It is adherence to this fundamental principle
5 by the ERCB, its predecessors, and regulatory
6 tribunals that may assume its mandate in the
7 future, which has allowed Alberta to attract the
8 breadth and depth of investment necessary to
9 develop its world-class energy resources.

10 The second core regulatory principle I will
11 address is conservation. As its name suggests,
12 resource conservation is central to the Energy
13 Resources Conservation Board's public interest
14 mandate. The Board exists to ensure that the
15 energy resources that we are endowed with in this
16 province are not wasted. Over the years, this
17 mandate has evolved to include conservation more
18 generally, including the equally important
19 objective of conserving our resources in the
20 natural environment. The Board currently shares
21 this responsibility with Alberta Environment and
22 Sustainable Resource Development.

23 As I proceed to discuss the specific issues
24 identified by the Panel from its issues list for
25 final argument, it should become clear that these

1 two regulatory principles of equity and
2 conservation are not competing principles. In this
3 case, they work together to arrive at outcomes that
4 are both fair and in the overall public interest.

5

6 **Sand Cell 2 External Tailings Disposal Area (ETDA)**

7 **Expansion**

8 Syncrude's argument starts with the specific
9 issues identified under paragraph 4.c. of the
10 issues list. It was the first item on this list,
11 Sand Cell 2 ETDA expansion, that caused Syncrude to
12 file its intervention.

13 Syncrude has been trying to resolve the issue
14 of the offset of Shell's south ETDA for quite some
15 time. As noted in Shell's Application and again in
16 its Opening Statement ¹ Shell Canada's Opening Statement, JPME
17 Hearing Transcript, Volume 3 (October 30, 2012) at pages 199-307 Shell
18 had requested an amendment to the approval of the
19 south tailings facility for Jackpine Mine from that
20 which was originally approved by the Board as part
21 of its Jackpine Mine Application. Shell, however,
22 had filed its Amendment Application back in 2007,
23 prior to the Board's issuance of *Directive 074*.

24 ² ERCB Directive 074, "Tailings Performance Criteria and Requirements for
25 Oil Sands Mining Schemes (February 3, 2009)

1 When Syncrude tried discussing Shell's
2 proposed expansion and extension of its south
3 tailings facility footprint in proximity to
4 Syncrude's lease boundary, Shell responded by
5 saying the ERCB had already approved the extension.

6 Leading up to this hearing, Syncrude thought
7 that it had managed to convince Shell otherwise
8 through its intervention which went into the
9 details of exactly what was and was not approved by
10 the Board. Syncrude then exchanged correspondence
11 with Shell in which Syncrude agreed not to pursue
12 this particular issue during the course of the
13 hearing in exchange for, and only after, Shell had
14 agreed with Syncrude that it would not be asking
15 for any approval of its expanded South ETDA at the
16 hearing until Shell and Syncrude could reach an
17 equitable agreement on managing the resources on
18 the south ETDA boundary with Syncrude's lease in
19 accordance with the objective of conservation.

20 Syncrude was surprised to then hear Shell
21 during the course of the hearing suggest or imply
22 that the reason it did not need approval of its
23 expanded tailings area and offset from Syncrude's
24 lease through this Application was because it had
25 already applied for such through a different

1 process and believed that the Board had given that
2 approval or at least had no concerns with what
3 Shell had proposed.

4 During the course of cross-examination by
5 Mr. Perkins, it became clear that Shell was relying
6 on its Annual Mine Plans and *Directive 074*
7 submissions to suggest that the Board had already
8 approved the amended configuration of its south
9 tailings facility. ³ JPME Hearing Transcript Volume 7 (November 5,
10 2012) at pages 1249-1253

11 Now, at the outset of my argument, I had
12 suggested that I have something to thank
13 Mr. Perkins for other than his issues list.
14 Syncrude is grateful for his follow-up on the
15 undertaking response provided by Shell on the
16 offset that it believed was approved from
17 Syncrude's lease boundary. ⁴ JPME Hearing Transcript Volume 8
18 (November 6, 2012) at pages 1547-1555 By the end of
19 Mr. Perkins's cross-examination, the record was
20 clear. Shell has now conceded that it does not
21 have approval for its expanded tailings area and
22 amended setback and it is not seeking such approval
23 in this Application.

24 There is much more work to be done in order
25 to ensure that the principles of equity and

1 resource conservation are achieved in the location
2 of Shell's south tailings facility. The
3 information that had been provided in support of
4 Shell's Application and the information provided in
5 its successive *D074* submissions, did not allow for
6 any reasoned decision to be made based on these
7 principles.

8 Shell has committed to work with Syncrude to
9 resolve these matters and bring the results of that
10 work back to the Board for its consideration and
11 ultimate approval. Syncrude is also willing to
12 participate in such process and is in fact reliant
13 on this process.

14

15 **Mature Fine Tailings (MFT) at Closure - End Pit Lakes**

16 This takes me to the second item under the
17 specific issues identified in paragraph 4.c. under
18 the issues list dealing with MFT at closure end pit
19 lakes.

20 Syncrude submits that this is another area
21 where parties are confused regarding the intention
22 behind *Directive 074*. There are some who argue
23 that the Board, in issuing *Directive 074*,
24 foreclosed the use of end pit lakes for the
25 treatment of MFT as part of reclamation.

1 Mr. Chairman, Members of the Panel, this makes no
2 more sense than for Shell to claim that it obtained
3 regulatory approval for its south tailings facility
4 through the *Directive 074* submission process.
5 Regarding the principle of equity, it would mean
6 that Syncrude's approved Reclamation Plans that
7 rely upon end pit lakes are based on decades of
8 research and careful planning along with hundreds
9 of millions of dollars of investment have
10 effectively been amended without any hearing
11 process.

12 Water capping of MFT is the most researched
13 reclamation technology that currently exists to
14 deal with MFT. No other technology has a higher
15 degree of certainty. Further, as even
16 Dr. Schindler admitted, if the technology works as
17 it is designed to, it would be preferable to
18 alternative reclamation options that have far
19 greater energy and surface land requirements. ^{5 JPME}
20 Hearing Transcript Volume 11 (November 9, 2012) at pages 2570-2571 For
21 reasons of equity and resource conservation,
22 *Directive 074* cannot reasonably be interpreted to
23 abandon or in any way affect the use of end pit
24 lake technology to address inventories of MFT or
25 other soft tailings products produced by all

1 current mining and extraction processes.

2

3 **End Pit Lakes**

4 **a) Risk/Uncertainty of the Strategy, Syncrude**

5 **Demonstration Lake**

6 That takes me to paragraph 4.e. of the issues
7 list that directly deals with end pit lakes. The
8 first issue in this paragraph is identified as
9 "Risk uncertainty of strategy: Syncrude
10 demonstration lake."

11 I have already stated that more research has
12 been done and there's more certainty with respect
13 to water-capping MFT than any other reclamation
14 technology for soft tailings. People like
15 Dr. Miller ⁶ Dr. G. Miller Presentation, End Pit Lake: Unresolved
16 Issues (Exhibit 017-031) at slide 2 and Dr. Schindler ⁷ JPME
17 Hearing Transcript Volume 11 (November 9, 2012) at pages 2542-2547 come
18 to this hearing and suggest to you that end pit
19 lake technology is based on modelling and modelling
20 alone and there's no certainty in modelling. They
21 have not, however, gone through the realtime data
22 that exists from decades of research from
23 Syncrude's test lakes. Not knowing their size,
24 Dr. Schindler calls them small. ⁸ JPME Hearing Transcript
25 Volume 11 (November 9, 2012) at pages 2556-2557 although it is

1 true that they are smaller than the base mine lake,
2 they are large facilities that provide decades of
3 valuable data that neither Dr. Miller nor
4 Dr. Schindler have reviewed.

5 As I suggested to Dr. Schindler in my
6 questioning of him, there was a voluminous record
7 already back in 1993 regarding the state of the
8 science of end pit lake technology. He did not
9 look for this information or review any of it, and
10 expressed relief that he did not have to sit
11 through the longest hearing in the history of the
12 oil sands. ⁹ JPME Hearing Transcript Volume 11 (November 9, 2012) at
13 pages 2553-2556

14 In my questioning of Dr. Schindler, we
15 discussed at some length the science of limnology
16 and the analytical tools used by that science.
17 ¹⁰ JPME Hearing Transcript Volume 11 (November 9, 2012) at pages 2540-2544

18 Syncrude's research and demonstration of end pit
19 lake technology uses the very analytical tools that
20 Dr. Schindler confirmed formed the basis of the
21 science of limnology.

22 Syncrude's initial conceptual approval of
23 water-capping MFT in end pit lakes was based on
24 years of data derived from large-scale test
25 facilities. From the data derived from these

1 facilities, Syncrude and others developed models
2 and we are now at the point of validating this work
3 through Syncrude's Base Mine Lake demonstration
4 project. It is essential in the public interest
5 that this important research and validation
6 continue to completion.

7 Dr. Schindler speculated that the reason that
8 Syncrude's approval for the base mine lake was
9 conceptual was because of uncertainty associated
10 with it. That is not correct. The reason that
11 approval is conceptual is because of the
12 jurisdictional mandates of Alberta Environment and
13 Sustainable Resource Development and the ERCB. The
14 conceptual approval is an ERCB approval. It is
15 Alberta Environment and Sustainable Resource
16 Development that is responsible for the ultimate
17 approval of all forms of reclamation, including end
18 pit lakes.

19 Syncrude has been working with Alberta
20 Environment for years on the Base Mine Lake
21 Demonstration Project. Syncrude requires approval
22 from Alberta Environment and Sustainable Resource
23 Development to conduct its Base Mine Demonstration
24 Project under the **Water Act** ^{11 RSA, 2000, c W-3}, and,
25 ironically, DFO required that Syncrude apply for a

1 HADD authorization ¹² Harmful Alteration, Disruption and
2 Destruction (HADD) authorization, pursuant to the *Fisheries Act* RSC, 1985,
3 c. F-14 in order to divert water from Syncrude's
4 Beaver Creek diversion system into the base mine
5 lake to provide the water cap.

6 The reason I say it is ironic, is that at
7 pre-development, Beaver Creek did not sustain any
8 fish populations of significance. Syncrude's
9 diversion system, in the opinion of DFO, provided
10 fish habitat that had to be compensated because it
11 lowered water levels in the diversion system that
12 Syncrude had constructed. This resulted in an
13 approximate two-year approval process. When
14 Dr. Schindler suggests that even if end pit lakes
15 work, they will eliminate creeks and streams that
16 constitute fish habitat, he is wrong. Oil sands
17 operators have already created this type of habitat
18 and will continue to do so as part of the drainage
19 plans that will incorporate end pit lakes.

20 Syncrude agrees with Dr. Schindler's
21 recommendation regarding the need for a number of
22 end pit lakes to be constructed and studied.

23 ¹³ Dr. David Schindler's Expert Report (Exhibit 017-016B) at page 15

24 As Dr. Schindler suggests, each lake will be
25 unique. Dr. Schindler agreed that within a couple

1 of decades we will have the data needed to confirm
2 the success of Syncrude's Base Mine Lake. ^{14 JPME}
3 Hearing Transcript Volume 11 (November 9, 2012) at pages 2570-2571 This
4 will in turn lead to further demonstration of the
5 technology at Syncrude's north mine and again, with
6 success there, at Aurora North. Each lake,
7 however, will be unique and must be successful.

8

9 **b) Contingency options**

10 The next item under paragraph 4.e. of the
11 issues list dealing with end pit lakes is
12 contingency options.

13 Contingency options were a requirement of
14 Syncrude's conceptual approval of end pit lakes.
15 During the 1993 hearing, work was just commencing
16 on consolidated tailings technology. A decade
17 later, this technology was commercially proven.
18 Then, well before the issuance of *Directive 074*,
19 Syncrude started working on centrifuging
20 technology, which was discussed by Mr. Roberts in
21 questioning by the Panel. ^{15 JPME Hearing Transcript Volume 8}
22 (November 6, 2012) at pages 1637-1642 Centrifuging is a viable
23 contingency option for end pit lakes with MFT. It
24 would not, however, be a contingency option for
25 other forms of soft tailings reclamation

1 technologies in the event that they do not deliver
2 a trafficable landscape. The fact is that the best
3 understood reclamation technology for soft tailings
4 is water capping and it is also the technology that
5 is best suited for the application of contingency
6 options.

7

8 **c) Liability Management**

9 The next item under paragraph 4.e. is
10 liability management for end pit lakes.

11 There is a legal response to this issue as
12 well as a practical response. And the two are
13 related.

14 Starting with the practical response, oil
15 sands mining will continue for decades. On a
16 number of occasions, Shell has indicated that the
17 expanded Jackpine Mine has more than a 40-year
18 reserve life. Syncrude is just completing its
19 investment made as part of Syncrude 21 that
20 involved investing billions of dollars, not only
21 for further upgrading capacity but in retrofitting
22 existing upgrading capacity to address acid-gas
23 emission concerns.

24 These significant investments have been made
25 in a reliance on mining approvals that Syncrude

1 currently holds at Mildred Lake, Aurora North and
2 Aurora South. At its current rate of production,
3 Synchrude will be producing and utilizing its
4 significant upgrading facilities for decades to
5 come. Not only does this accommodate progressive
6 reclamation using end pit lakes, it assures the
7 financial capability to see that reclamation
8 through to a successful conclusion.

9 This practical response is related to the
10 legal answer because the reality of valuable oil
11 sands reserve back-stopping reclamation success is
12 at the heart of the mine liability management
13 system that has been recently adopted and was
14 spoken to by Mr. Broadhurst in questioning by the
15 Panel. ^{16 JPME Hearing Transcript Volume 8 (November 6, 2012) at pages}
16 1637-1640

17

18 **d) CEMA Guidelines - Applicability and Suitability**

19 Moving on to the last item under
20 paragraph 4.e. that I will address on behalf of
21 Synchrude, we arrive at the issue of the CEMA
22 guidelines applicability and suitability.

23 Mr. Cooke, your question of Shell's witness
24 panel made this a very important issue. You've
25 apparently been struggling to understand why

1 Syncrude would not have endorsed guidance provided
2 through CEMA. ¹⁷ JPME Hearing Transcript Volume 8 (November 6, 2012)
3 at pages 1632-1633 The fact that Syncrude would have
4 reservations about this guidance seems to have
5 undermined your confidence in end pit lake
6 technology.

7 To understand the letter Syncrude submitted
8 in respect of CEMA's guidance document ¹⁸ Syncrude Letter
9 dated August 21, 2012 - Appendix to CEMA Recommendation to Alberta
10 Government - End Pit Lakes Guidance Document (Exhibit 02-39) , one must
11 understand the history of CEMA. Although it is a
12 science-based organization, it is also one that is
13 constituted by multiple stakeholders that have
14 their own perspectives. There's government,
15 industry, First Nations, environmental
16 organizations. Given that CEMA has been a
17 consensus-based organization, there have been
18 occasions upon which compromise is sought in order
19 to obtain consensus. There would be a number of
20 participants in CEMA who may be the same groups and
21 organizations that interpret *Directive 074* as
22 abandoning end pit lakes as a reclamation option
23 for soft tailings. This bias on the part of some
24 members of CEMA led to an implication in the
25 document that the introduction of MFT into end pit

1 lakes posed additive risks. There is absolutely no
2 science behind any such implication or suggestion
3 and it is one of the concerns Syncrude voiced in
4 its comments to explain its concerns with the CEMA
5 document.

6 This is what Syncrude is responding to in its
7 letter. The Panel Secretariat put this question to
8 Dr. Schindler directly. He pointed out that end
9 pit lakes will have to contend with surface and
10 groundwater that encounters products of tailings
11 streams which will have to be managed in any event.

12 19 Dr. Schindler's Responses to Secretariat Questions (Exhibit 017-051) -
13 Questions 12 and 13 at pages 6-7

14 No one knows the science of end pit lake
15 technology better than the scientists who work for
16 and with Syncrude. When Syncrude expressed
17 reservations regarding CEMA's science document, it
18 was based on its experience. To the extent that
19 CEMA guidance document can in any way be
20 interpreted as suggesting that the risk of
21 proceeding with end pit lake technology is
22 increased by water-capping MFT, Syncrude submits
23 that the science simply does not support those
24 taking that view. Just as *Directive 074* does not
25 prejudge Syncrude's Base Mine Lake Project, neither

1 should the CEMA guidance document.

2 In conclusion, the core regulatory principles
3 that instruct and guide regulators, industry, and
4 government, are equity and resource conservation.
5 All regulations, directives, and guidance documents
6 must be developed based on these fundamental
7 principles. Once they are written, they must be
8 interpreted using these principles, and, if
9 necessary, they must adapt in order to meet these
10 principles. The ERCB and its predecessors have a
11 long history of responsibly applying these
12 principles to both conventional oil and gas
13 resources, and now, for almost 50 years, the oil
14 sands.

15 Regulators, governments and industry all at
16 times face pressure that could cause them to want
17 to stray from these principles, we do so, however,
18 at our peril. It is adherence to these principles
19 that has made the oil sands industry not only
20 commercially viable, but one of the most
21 significant energy resources in the world. The oil
22 sands industry has attracted investment and
23 long-term commitment from the world's leading
24 energy companies. This in itself has substantially
25 mitigated the historical, technological, and

1 environmental risks, that the industry has had to
2 confront.

3 Not so many years ago, there were those that
4 insisted that the oil sands would never be a
5 commercial success. Not many of those sceptics
6 remain. They have, however, been replaced by
7 sceptics that suggest the oil sands industry,
8 working with government and its regulators, will
9 not achieve reclamation success. Experience has
10 shown that the vigour of these sceptics will surely
11 dissipate with time. ^{20 JPME Hearing Transcript Volume 11}

12 (November 9, 2012) at pages 2543-2544

13 Those are my submissions. Thank you very
14 much, Mr. Chairman, Members of the Panel. If you
15 have any questions, I would be happy to respond.

16 THE CHAIRMAN: We have no questions,

17 Mr. Roth. Thank you.

18 MR. ROTH: Thank you.

19 THE CHAIRMAN: Ms. Buss for Fort McKay First
20 Nation.

21

22 **FINAL ARGUMENT OF THE FORT MCKAY FIRST NATION AND FORT**

23 **MCKAY MÉTIS COMMUNITY ASSOCIATION, BY MS. BUSS:**

24 MS. BUSS: Good afternoon, Mr. Chairman,

25 Members of the Panel, staff, and the other counsel

1 and parties in the room.

2 My first order of business is to file an
3 amendment to Fort McKay's pre-hearing submission.
4 And I took the liberty of providing copies to the
5 Panel during the break and to my friends at Shell,
6 as well I have an extra copy for Board counsel.

7 And so this exhibit is a replacement for the
8 Requested Disposition section in Fort McKay's
9 Exhibit 009-008. And I'm wondering, Mr. Chairman,
10 if we might have this filed. I believe it will be
11 Exhibit 009-011.

12 THE CHAIRMAN: Yes, it is.

13

14 **EXHIBIT 009-011: REPLACEMENT FOR THE REQUESTED**
15 **DISPOSITION SECTION IN FORT MCKAY'S**
16 **EXHIBIT 009-008**

17

18 MS. BUSS: Now I've also provided the
19 court reporter with my speaking notes, which
20 include references to the evidence which I will not
21 be repeating in oral submissions but ask that that
22 be inserted into the transcript. And I may also
23 deviate from my speaking notes, in which case I ask
24 that my verbal comments take precedence.

25 Mr. Chairman, I'm also not going to read into

1 the record the Requested Disposition in order to
2 save time, but I am going to speak to why we're
3 asking for that disposition and specifically the
4 recommendations, what evidence you have to rely
5 upon in meeting our request, and just briefly
6 highlight some points in the evidence that we would
7 like you to be cognizant of.

8 So, firstly, why does Fort McKay seek these
9 recommendations? Fort McKay would find it very
10 helpful for the Panel to make the recommendations
11 requested because both Canada and Alberta's
12 consultation frameworks and policies rely, in part,
13 upon the findings and recommendations of this
14 Panel, or panels like yourselves. Therefore, in
15 order to be eligible for further consultation or
16 meaningful consultation on regional impacts, there
17 needs to be some reference to it or some
18 requirement or recommendation in the Panel's
19 decision in order for Canada particularly to pay
20 attention to it, but Alberta is also following that
21 general practice.

22 And a second reason is, frankly, Fort McKay
23 has not been able to get either government to pay
24 attention to the increasing regional impacts and
25 need for accommodation with respect to Treaty and

1 Aboriginal Rights of the community, although we
2 have asked numerous times.

3 So what evidence does the Panel have to
4 support the request for recommendations? First of
5 all, we have the Fort McKay Specific Assessment,
6 which wasn't able to be filed because it's very
7 large, but it was part of Shell's Application
8 pursuant to an agreement made between the parties
9 in 2008. It itself is a detailed Environmental
10 Impact Assessment of impacts directly as they
11 relate to the community. It includes a
12 pre-development baseline, cultural baseline study,
13 cultural impact assessment, as well as the
14 traditional categories of Environmental Impact
15 Assessment like air, water and so on.

16 Secondly, there's the Environmental Setting
17 Report, which is in the 2007 Environmental Impact
18 Assessment Section 3.3.1, which documents
19 traditional land use by Fort McKay.

20 Thirdly, there is a Fort McKay First Nation
21 Traditional Knowledge Report from 2008 prepared on
22 behalf of Shell filed as part of the Application.

23 So these latter two reports, both extensively
24 document Fort McKay's traditional land use and
25 practices and the use of natural resources in the

1 Regional Study Area. And then in Volume 5 of the
2 EIA, Section 8.3 is an assessment of the impacts or
3 some assessment of the impact on those rights and
4 activities.

5 Shell's Cumulative Effects Assessment and
6 Assessment of Impacts on Aboriginal Communities
7 filed in May of this year also provides helpful
8 information to the Panel. And these documents rely
9 in part on the Fort McKay Specific Assessment as
10 their source of information.

11 And then, finally, you also have information
12 about the increasing environmental impacts and
13 changes to the land which is contained throughout
14 Shell's Assessment.

15 Next I'm going to highlight just a few
16 aspects of the impacts identified in evidence
17 before the Panel. I expect that much more detail
18 will be highlighted by other parties, so I don't
19 want to repeat that.

20 But I do note some things for you to pay
21 attention to. One originally comes from Shell's
22 Cumulative Effects Assessment in May 2011 in answer
23 to an SIR from the Panel. That contains in Table
24 2.5-1 a calculation of the direct land and
25 disturbance in the Regional Study Area with respect

1 to Fort McKay. And it shows that from the
2 Pre-Industrial Case, of which there was
3 approximately 1700 hectares of direct disturbance,
4 that's changed in the 2012 Base Case to 674,968
5 hectares; that constitutes an increase of
6 31 percent in the intensively-used cultural areas
7 of Fort McKay, and 29 percent of the moderate-use
8 areas.

9 Table 3.5-1 of the same document shows
10 disturbances to traplines in the Local Study Area,
11 which form a component of the overall Fort McKay
12 traditional land use and trapping area. Of the
13 four traplines specifically mentioned, three
14 currently belong to Fort McKay members, that's
15 1716, 2137, 2172.

16 And then the area of the traplines affected
17 in the JPME Application and the Planned Development
18 Case is the same: 57 percent, 53 percent and
19 63 percent respectively.

20 Now, if you look at the evidence, you will
21 see that trapline 1714 is included as a Fort McKay
22 trapline in the Fort McKay Specific Assessment and
23 in two Traditional Land Use Studies filed by Shell
24 that I referenced.

25 These documents indicate that at the time

1 that these assessments and reports were prepared,
2 trapline 1714 was registered to Annie L'Hommecourt,
3 who was a Fort McKay First Nation member, but she's
4 now deceased. So that explains that discrepancy
5 for the Panel.

6 Now carrying on in that same document, the
7 next section deals with changes from the Base Case
8 to Planned Development Case. And you'll see in
9 there that the changes to Fort McKay's traditional
10 area due to land directly disturbed for all types
11 of traditional land use is a total increase from
12 31 percent to 36 percent for the PDC, and for
13 moderately-used areas, the increase is 29 percent
14 to 37 percent in the PDC.

15 Table 3.5-5 shows disturbance to traditional
16 plant-harvesting areas will increase from
17 47 percent to 55 percent for the intensively-used
18 areas, and 31 to 42 percent for the moderate-use
19 areas.

20 That's going to be all the figures that I'll
21 cite to you.

22 But I would ask is that you also consider
23 that these disturbance numbers need to be put in
24 perspective because they are direct disturbance.

25 As Shell noted in its November 2011

1 Traditional Land Use Update Report, its assessment
2 of the significance of impacts did not include the
3 value placed on resources by Aboriginal persons,
4 but, and I quote (as read):

5
6 "Agencies responsible for
7 making public-interest decisions
8 should be aware of the value placed
9 on these resources by local users
10 as part of their decision-making
11 process."

12
13 Fort McKay agrees with that statement, and
14 that is why it provided, or partly why, it provided
15 the Fort McKay Specific Assessment because it helps
16 everyone, including the Panel, understand how land
17 and resource-use patterns are affected by regional
18 development and how that ties into the cultural
19 identity and values of the community.

20 Now, the Fort McKay Specific Assessment
21 looked at what they're calling the 40 Township
22 area, which is Townships 93 to 100 and Ranges 8 to
23 12. And that's located within Shell's RSA.

24 And that area was chosen in part because it
25 represented all of the traditional land use area

1 that was reasonably accessible from the community.

2 Now, of that area, at the time that the data
3 for the Fort McKay Specific Assessment was
4 collected in 2007, so even though the report is
5 dated 2010, so these numbers are underestimating
6 current impacts. But in any event, it showed that
7 133,000 hectares was estimated to be disturbed in
8 the Planned Development Case, as it was known in
9 2007. Of course it would be greater now. But what
10 was important was that 91 percent of these
11 disturbances occurred within the moderate or
12 intensively used areas of Fort McKay's traditional
13 land use, or TLU area. And all of it occurred on
14 Fort McKay's, or the same 91 percent applied to it
15 occurring on Fort McKay traplines.

16 Now, the other important perspective is that
17 the direct disturbance numbers in the cumulative
18 impact assessment prepared by Shell relates to
19 direct impacts only. It does not include loss of
20 access and indirect disturbance. For example, you
21 know, the zone of influence we heard about for
22 wildlife, which, you know, is somewhere around 500
23 metres around for example a mine site, it does not
24 include the loss of trails. In the 2007 Planned
25 Development Case, the Fort McKay identified or the

1 Fort McKay Assessment identified 107 kilometres of
2 trails would be lost, which is 38 percent. And
3 that doesn't capture the whole effect because if
4 you take out a significant chunk of a trail,
5 obviously it's like a road, you take out the middle
6 and the two end bits aren't very useful to you.

7 And I also would direct your attention to the
8 2008 TEK study as well as the Fort McKay Specific
9 Assessment filed by Shell, because that provides
10 you a description of the actual difficulties
11 experienced by Fort McKay members.

12 You can see from any map that because the
13 community is surrounded by development that it's
14 going to require circumvention of large mine sites
15 in order to access certain areas. Fort McKay
16 members also spoke about difficulties, even getting
17 lost on the land, because the landscape has changed
18 so much and not being able to find their way with
19 the traditional trails gone and land disturbed.

20 The other important piece of information for
21 the Panel to be cognizant of when considering Fort
22 McKay's request is the loss or declining wildlife.
23 The Traditional Environmental Knowledge report
24 filed by Shell documents that Fort McKay members
25 have observed declining population levels,

1 particularly in lynx and moose.

2 Now, wildlife populations are not monitored
3 regularly in the region, and we submit that this is
4 quite a significant gap.

5 However, there has been some recent studies
6 by Alberta Sustainable Resource Development and
7 these are described, some of these are described in
8 Shell's Updated Moose Population Viability
9 Assessment.

10 Now, Shell's own assessment admits that
11 there's evidence of declining moose populations.
12 For example, the survey of Wildlife Management Unit
13 531, which is about 50 percent of that or so is
14 within the Regional Study Area, indicated a decline
15 of 60 percent in the population between 1994 and
16 2009.

17 Exhibit 017-030 is another moose survey done
18 for Wildlife Management Unit 530, which again is
19 around half of which is in the RSA, and it also
20 showed declining population levels as compared to
21 past surveys.

22 And interestingly, that document notes that
23 SRD planned surveys to be done every five years but
24 they continue to be underfunded, which I guess
25 accounts for their scarcity.

1 Now, the lack of wildlife population counts
2 for the region underscores the important point that
3 simply pointing to an absence of evidence does not
4 equate with absence of effects. It just means that
5 the monitoring is inadequate.

6 Now, the other exhibit that was filed was an
7 excerpt from Dover, the Dover Project, an
8 Environmental Impact Assessment, which also
9 predicted a significant -- sorry, this wasn't a
10 study, this was a prediction -- decrease in habitat
11 for moose, black bear, and snowshoe hare. But the
12 Dover Project is on the west side of the river, and
13 we just point that out because one cannot assume
14 that wildlife populations are going to be available
15 in the far reaches of Fort McKay's traditional
16 territory.

17 Now, we also point out that this evidence of
18 declining wildlife in the region is not surprising.
19 It's entirely consistent with the predictions from
20 the research and modelling that was done by CEMA
21 for the Terrestrial Effects Management Framework in
22 2007.

23 Now, I turn back again to the issue of
24 significance assessment. Fort McKay's Assessment
25 of Significance to the Impact to its Culture and

1 Way of Life is included as an Appendix to
2 Exhibit 001-088. It's called the "Cultural
3 Heritage Baseline."

4 Interestingly, Shell prepared its own
5 Cultural Heritage Assessment, which referred in a
6 number of instances to Fort McKay's Specific
7 Assessment but did not refer to the conclusions or
8 the actual assessment of impacts. And it makes no
9 reference to the methodology, either.

10 But in a nutshell, I can explain that the
11 Cultural Heritage Baseline looked at cultural
12 values that were expressed and maintained through
13 cultural activities and through what might be
14 called "project mitigation," such as participation
15 in industry jobs and more educational
16 opportunities.

17 Nevertheless, it concluded, based on erosion
18 in community values, that regional development was
19 having a significant and adverse effect.

20 Now, on the other hand, Shell's assessment
21 found no significant effect for the regional impact
22 on culture or Aboriginal people and it only found
23 one moderate effect, which was to visual impacts
24 and noise.

25 Now, the reason for the difference is the

1 methodology used by Shell's consultant was simple:
2 It concluded because the Project site only made up
3 1.0 percent of the total of this very large
4 Regional Study Area used in this Impact Assessment,
5 therefore any changes could only be contributed to
6 by 1.0 percent. So no matter what changes were
7 going on around, the impact was insignificant from
8 the Project. So that's how they went about it.

9 Now, why I point out this methodology, which
10 this Panel or Members of the Panel have seen many
11 times, is that this takes us back to Fort McKay's
12 reason for asking for the recommendations from the
13 Panel. Every project EIA says its contribution to
14 regional effects are not material because each
15 project's contribution is 1 or 2 or 5 percent of
16 the total because the total area is big. And
17 getting bigger. As projects get bigger, the
18 reference area is bigger.

19 Now, what that means is that no single
20 operator is responsible for the large-scale
21 landscape change and resources change that are
22 going on, but it doesn't negate the fact that they
23 are going on.

24 Now, if you listen carefully to, which I'm
25 sure you did, Alberta and Canada's submissions on

1 consultation, it was important to note what they
2 didn't say. The only post-hearing consultation
3 that they referred to was in relation to the
4 Project's effects and the Project's approvals.
5 Neither government mentioned a process for
6 consulting specifically on the cumulative effects
7 of regional development and their significance to a
8 specific community.

9 So nobody is consulting or addressing the
10 accumulation of all of the 1.0 percents and
11 5 percents.

12 Now, the regional effects that Fort McKay
13 identified require measures -- what I should say is
14 that are also identified in part in Shell's
15 assessment -- these regional effects require
16 measures that only government can provide and only
17 government is responsible for implementing the
18 terms of Treaty 8 and protecting Treaty and
19 Aboriginal Rights. That's why at some point the
20 government needs to come to terms. And, frankly,
21 that would help establish peace in the valley
22 because there's no doubt that these impacts are
23 going to continue.

24 Now, I know government will say and operators
25 will say that LARP is an answer, the Lower

1 Athabasca Regional Plan, is one way of dealing with
2 these regional impacts. However, if you look at
3 the conservation areas that are included in the
4 plan filed in these proceedings, you will see that
5 very little of the conserved or protected areas are
6 in Fort McKay's traditional territory. Just from
7 looking at it, you can calculate that it's roughly
8 10 percent, maybe, of the total protected areas.
9 Now, this isn't surprising considering that
10 85 percent of Fort McKay's traditional land is
11 leased for development. But that does not mean
12 that other measures are not required, there are
13 still things that could be done. The new
14 monitoring plan, for example, will hopefully
15 address the inadequacies of the present system, and
16 Fort McKay agrees it's very important to monitor,
17 but also that monitoring itself is not mitigation.
18 What it does is documents the need for mitigation.
19 Things that many of the Fort McKay members are
20 observing themselves every day and are monitoring
21 through their daily experience.

22 Now, finally, I just want to make a couple of
23 points about air quality.

24 Fort McKay is the community that's most
25 affected by emissions from the oil sands

1 development. Chapter 2 of the Fort McKay Specific
2 Assessment provides a detailed examination of
3 emission predictions as well as ambient air quality
4 trends. Admittedly it's outdated now and there are
5 some newer numbers in the more recent amendments to
6 Shell's EIA, which are entirely consistent with the
7 trends identified in the Specific Assessment, that
8 is, shows that emissions are steadily increasing
9 and air quality is deteriorating.

10 Now, there's one exception possibly which is
11 SO₂, and that's moderate, the increase in SO₂
12 emissions has moderated somewhat as a result of
13 Syncrude's desulphurization unit.

14 Now, Fort McKay is doing its best to monitor
15 the situation itself but it still relies heavily on
16 regulators and the regulators to diligently watch,
17 manage and monitor this situation so that this
18 trend doesn't continue to rise at the rate that it
19 is rising.

20 It will eventually become, well, not very
21 long in the near future, will become a significant
22 problem if it's not managed.

23 We also point out that there's a major gap in
24 the regulations and that is that there's no
25 standards for odours or a regional system to manage

1 them. And that's one of Fort McKay's requests.
2 And we ask that the Panel highly recommend that
3 this be done forthwith. We think that this will
4 bring the request up a bit in the priority for the
5 new monitoring systems.

6 So thank you very much for your attention.
7 And I think I might have made my time estimate
8 which might redeem me from being the worst time
9 estimator at this hearing. Thank you, Panel.

10 THE CHAIRMAN: Ms. Buss, I think you beat
11 your time estimate, so congratulations.

12 MS. BUSS: Thank you.

13 THE CHAIRMAN: Ms. Bishop, if you were going
14 to be three quarters of an hour or so, maybe we
15 could just take 10 minutes for the reporter.
16 Thanks.

17

18 **(Brief Break)**

19

20 THE CHAIRMAN: Ms. Bishop, would you like to
21 go ahead with your argument.

22

23 **FINAL ARGUMENT OF THE MÉTIS NATION OF ALBERTA REGION 1**

24 **AND THE INDIVIDUALS AND GROUPS NAMED TOGETHER WITH**

25 **REGION 1, BY MS. BISHOP:**

1 MS. BISHOP: I'd like to thank the Panel
2 for this opportunity to present final argument on
3 behalf of my clients. I say I'm very proud to
4 stand here today on behalf of my clients. It's
5 been a challenging and very rewarding process;
6 challenging, primarily because of the lack of
7 funding, capacity, witnesses and witness schedules.
8 Volunteers, for the most part, make up the
9 Government of the Métis Nation of Alberta.

10 But through the efforts of Region 1 and the
11 Locals, my clients have brought to you their
12 concerns, they've brought them in a cohesive way,
13 and they ask you not to ignore their hard work.

14 Capacity has been an issue. My friends at
15 Shell mention \$80,000 in CEAA funding. We advise,
16 we understand that's for two processes, and so that
17 brings us down to about \$40,000.

18 We also point out that the ERCB in history
19 has never advanced funds under *Directive 031* to a
20 Métis group.

21 The Métis as a people have a rich history of
22 independence and perseverance and I think their
23 intervention in these proceedings proves this
24 point.

25 They've worked hard. They've travelled many

1 miles. And you will see in the audience the
2 president and vice-president of the Métis Nation of
3 Alberta Region 1 who travelled in from Lac La Biche
4 today, and also Jumbo Fraser from Local 125 who
5 travelled from Fort Chip.

6 They are here to remind you that the lands in
7 the Local Study Area and the Regional Study Area
8 are their homelands and they are still used by many
9 Métis, members of the Métis Nation of Alberta in a
10 traditional way.

11 I refer you to Exhibit 010-023 and that is
12 Barb Hermansen's story. You heard from
13 Ms. Hermansen, her poignant story of the Métis
14 community where she grew up. The community that
15 spanned from Fort McMurray to Fort Chip, but
16 primarily where she grew up, on trapline 2331,
17 which is in the LSA.

18 Maps within that exhibit, Figure 4, show the
19 extensive Métis use of the area. She mentions the
20 other Métis families that she grew up with that
21 continue to trap and hold traplines in the area,
22 MacDonalds, the Grants, LaCailles. Shell's
23 argument today seeks to erase that mark of the
24 Métis, their historic and current use in the area.
25 And if not erase, seeks to ignore it.

1 Shell talks about an assessment of current
2 traditional use. My clients submit that completely
3 misses the point of their evidence. It might
4 explain why Shell's Traditional Land Use reports do
5 not mention any of the Métis historic use that my
6 clients presented to you. Nor does it take into
7 account any of the publicly-available historic
8 literature, presented to some degree by Peter
9 Fortna. None of it was included in Shell's EIA.

10 It seems as though this morning Shell
11 suggested that with the \$40,000 in CEAA funding, my
12 clients should have done a thorough review of the
13 EIA and presented that to you. And I suggest to
14 you that this misses the point. It also is not in
15 accordance with the case law from the Supreme Court
16 of Canada. And I refer you to a passage that's in
17 our submissions but it's a passage from **Haida** and I
18 just wanted to read that to you. It's reproduced
19 on page 21 of our submissions (as read):

20
21 "The Supreme Court has been
22 clear that in order for the duty to
23 consult to be engaged, the
24 Aboriginal Right does not have to
25 be proven but merely credibly

1 asserted."

2

3 And this is from **Haida**:

4

5 "The government's arguments
6 do not withstand scrutiny. Neither
7 the authorities nor practical
8 considerations support the view
9 that a duty to consult and, if
10 appropriate, accommodate arises
11 only upon final determination of
12 the scope and content of the right.

13 The jurisprudence of this
14 Court supports the view that the
15 duty to consult and accommodate is
16 part of a process of fair dealing
17 and reconciliation that begins with
18 the assertion of sovereignty and
19 continues beyond formal claims
20 resolution. Reconciliation is not
21 a final legal remedy in the usual
22 sense. Rather, it is a process
23 flowing from rights guaranteed by
24 Section 35(1) of the **Constitution**
25 **Act, 1982**. This process of

1 reconciliation flows from the
2 Crown's duty of honourable dealing
3 towards Aboriginal peoples which
4 arises in turn from the Crown's
5 assertion of sovereignty over an
6 Aboriginal people and de facto
7 control of land and resources that
8 were formerly in control of that
9 people."

10

11 And I just wanted to refer you to that
12 passage because I think for Shell to stand here as
13 a delegate of Alberta and suggest that the onus
14 should be on my clients to prove to you what the
15 use is and what the impacts are, I say that's an
16 impoverished view, and so do the Courts.

17

18 My clients came to this hearing and they
19 wanted to be heard. They are asking in part for a
20 Consultation Policy from the Government of Alberta.
21 They have rights protected by the **Constitution**,
22 Section 35 states:

23

24 "The existing Aboriginal and
25 Treaty Rights of the Aboriginal
 peoples of Canada are hereby

1 recognized and affirmed. In this
2 Act, Aboriginal peoples of Canada
3 includes the Indian, Inuit and
4 Métis peoples of Canada."

5
6 And case laws define what this means,
7 specifically in **Powley**. And I just want to go
8 through **Powley** really quickly. I know my friend
9 talked about it. And I think that if you look into
10 this case, it explains why my clients are here.

11 So I just refer to page 14 of **Powley**, which
12 is Tab 1 of our Book of Authorities. Page 14,
13 paragraph 7 states:

14
15 "The inclusion of Métis, the
16 Métis Section 35 represents
17 Canada's commitment to recognize
18 and value the distinctive Métis
19 cultures, which grew up in areas
20 not yet open to colonization, and
21 which the framers of the
22 **Constitution Act, 1982** recognized
23 can only survive if the Métis are
24 protected along with other
25 aboriginal communities."

1

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And further at paragraph 18:

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"Section 35 requires that we recognize and protect those customs and traditions that were historically important features of Métis communities prior to the time of effective [European] control, and that persist in the present day."

So in the **Powley** test, there's the discussion of a number of different characteristics that should be looked at. And I'll just present our evidence along with the test as we go through.

Métis rights are contextual and site-specific. And that is the first test under **Powley** is characterizing the right. In this case, the use of both the Regional Study Area and the Local Study Area clearly show Métis occupation and use in the LSA and the RSA. And I refer you to the maps in Barb Hermansen's book and also her description of the families in the area.

Traplines in the area at that time before

1 Bill C-31 were primarily Métis and families lived
2 on the traplines. And for Métis people, this was
3 where they lived and where they grew up, they had
4 no reserve lands.

5 The second test under **Powley** is
6 identification of the historic rights-bearing
7 community. And this is important in terms of my
8 friend's criticism of our group. There's no
9 question that there's a strong connection, based on
10 the evidence that we've provided within our
11 submissions that there's a strong connection
12 between Lac La Biche, Fort McMurray, Fort McKay,
13 Conklin, and Fort Chipewyan. The evidence that we
14 provided in historic reports establishes that there
15 is a continuous historic Métis community in the
16 area from Lac La Biche extending north of Fort
17 Chipewyan. And I refer to the historical report of
18 Frank Tuff and John Aniak that was filed in our
19 submissions and Shell agreed could go in
20 unquestioned. This is Exhibit 010-004K. And I
21 also refer you to the work of Tereasa Maillie,
22 Exhibit 010-004C, entitled "The Métis Experience in
23 Northeastern Alberta."

24 My clients do not agree that only Fort McKay
25 and Fort Chip are historic communities. It is

1 clear that there are also historic settlements in
2 Fort McMurray, MacDonald Island and Waterways, that
3 stretched along the river past McKay and to Fort
4 Chip. This area was settled by chain migration
5 from Lac La Biche northward and this was discussed
6 in the expert reports that we provided.

7 **Powley** talks about the importance of
8 identifying the contemporary rights-bearing
9 community. And at page 17, paragraph 24, it talks
10 about how Aboriginal Rights are communal rights,
11 and this is why I felt as though it was important
12 to talk a little bit about **Powley** because it brings
13 into perspective the consultation requirements.

14 **Powley** states (as read):

15
16 "The contemporary
17 rights-bearing community must be
18 grounded in the existence of a
19 historic and present community and
20 they may be exercised by virtue of
21 an individual's ancestry-based
22 membership in the present
23 community."

24
25 So there's no question that my clients gave

1 evidence, or their witnesses gave evidence, that
2 they self-identify as Métis, they belong to
3 different contemporary Métis communities or Locals.
4 For example the evidence of Mike Guertin and Johnny
5 Grant, Barb Hermansen and her sons, all currently
6 use the area, and they all have traplines or had
7 traplines, and current leases, and I think they all
8 have current leases. Barb Hermansen, her estranged
9 husband has a lease within the Regional Study Area.

10 So these are all different users within the
11 area and they all identify to a different Local,
12 which is also evidence of a broader Métis community
13 stretching from Lac La Biche on. Mike Guertin
14 currently lives in Lac La Biche, Johnny Grant
15 associates with Fort McMurray and Barb Hermansen
16 with Fort Chip.

17 The fourth arm of the **Powley** test is:
18 "Verification of the claimant's membership in the
19 relevant contemporary community." And what **Powley**
20 says at page 19, paragraph 29 (as read):

21
22 "While determining membership
23 in the Métis community may not be
24 as simple as verifying membership
25 in for example an Indian Band, this

1 does not detract from the status of
2 Métis people as full-fledged rights
3 bearers."

4
5 And I think that's important. You know, my
6 friend raised the issue of which groups should they
7 consult. And we suggest it's not that difficult.
8 There is a Métis government. There are Métis
9 Locals. There is a government structure that
10 should be used.

11 The fifth arm of the **Powley** test is
12 identification of the relevant timeframe. And
13 **Powley** changes the test to a test of effective
14 control.

15 And we suggest in that area it was later than
16 Lac La Biche, around the 1900s, and this is
17 important as well.

18 Whether the practice is integral to the
19 claimant's distinctive culture, this is the sixth
20 arm, and I think it's clear from the evidence you
21 heard from my witnesses or my client's witnesses
22 that trapping, hunting and harvesting in the area
23 of the proposed Jackpine Mine Expansion was
24 integral to the Métis way of life. They lived
25 there. They lived off the land.

1 And contrary to what my friend said this
2 morning, there is evidence of Métis gathering,
3 fishing and hunting, specifically in the maps that
4 were entered from the *Mark of the Métis*. And those
5 were entered separately as Exhibit 010-024. And I
6 hope you'll take a look at those maps because,
7 contrary to what my friend said this morning, there
8 is documentation of berry gathering, plant
9 harvesting, fishing and hunting in the area of
10 McLennan Lake and also around the mouth of the
11 Firebag River.

12 Continuity is important in the **Powley** test,
13 and you heard from my clients that they currently
14 use the area, currently exercising those rights.

15 Now, this the eighth arm of the test,
16 determination of whether or not the right was
17 extinguished, clearly there's no extinguishment of
18 the Métis rights in the area. There's no Treaty.
19 Arguably, my clients still hold commercial hunting
20 and fishing rights in the area.

21 Section 9 of the **Powley** test states if
22 there's a right, determination of whether there is
23 an infringement. And the **Kelly** case, which is an
24 Alberta case, states that the lack of recognition
25 of Métis rights is in itself an infringement. And

1 that **Kelly** case is also within our Book of
2 Authorities, Tab 9, and I refer you to
3 paragraph 64.

4 And the last arm of the **Powley** test, which is
5 important here as well, is determination of whether
6 the infringement is justified. And my friend
7 suggested that that's what we're here to discuss
8 today.

9 On the record there's no evidence of any
10 investigation of Métis use in the area, there's no
11 TLU or TK in the area with respect to the evidence
12 that you heard from my clients. And I just want to
13 point you to some of the transcript references, and
14 the evidence of Mr. Goodjohn.

15 In Volume 4, page 651, I asked Mr. Goodjohn
16 about the importance of looking at historical use
17 of traplines. And he responded at line 21:

18
19 "In response to your
20 question, before you do move on, I
21 just want to make clear that what
22 we're trying to understand is the
23 effects to the trapline and
24 traditional activity as it's
25 occurring today..."

1

2

And I think that this misses the point in terms of what rights we're looking for in terms of **Powley** and what traditional use actually is.

5

6

7

8

I asked him on page 652, line 4, if he knew that trapline 2331 was formerly owned by Edmond Ducharme, and he said he wasn't aware of that, he had spoken only to the current owner.

9

10

11

12

And at the time, I also asked about trapline 1716, which, before his death, was held by a Fort McKay Métis member who Mr. Goodjohn had called a Fort McKay First Nation member.

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Mr. Goodjohn went on to agree that he did not look at any of the historic Métis literature, any of the publicly-available documentation. He mentioned that he did look briefly at the Northern Rivers Basin Study, but he said at page 714, line 22, it was the Northern Rivers Basin Study, and that includes areas, it includes the Métis people in Fort Chip and it includes all residents in Fort Chip in the aggregate admittedly. And he went on to say that it was quite general.

23

24

25

However, you heard from Peter Fortna upon review of the transcripts of that study, the evidence of my clients would have come clear to

1 Shell. The use of Castor's cabin, Edmond Ducharme,
2 Barb Hermansen.

3 You might all remember the deadpan silence
4 when I asked about my client Johnny Grant. There
5 wasn't one member on Shell's panel that knew who
6 Johnny Grant was.

7 I submit to you that justification in your
8 job, if you're finding that an impact is justified,
9 it cannot occur in the complete absence of an
10 assessment of the right and impacts. Métis
11 harvesting, hunting, fishing rights exist in the
12 area of the proposed Jackpine Mine, they are
13 represented by the MNA Region 1 as agents for Métis
14 and MNA members, and we submit that they are the
15 appropriate body to do so.

16 And if you look at the case, and I hope
17 you'll have a chance to read it, the **Newfoundland
18 and Labrador v. Labrador Métis Nation 2007 NLCA 75**
19 in Tab 11 of our authorities. And this was a case
20 that was also discussed by Mr. Clem Chartier.

21 Shell is under the impression, so it would
22 seem, that the Terms of Reference only applied to
23 First Nations. This is documented in
24 Exhibit 010-030. And these were the meeting
25 minutes of a recent meeting between Shell and Local

1 1935. Meeting minutes that were produced by Shell
2 where they said (as read):

3
4 "Métis Local 1935 queried the
5 possibility of sustainability
6 funding. Shell advised that they
7 don't provide such funding as they
8 aren't legislated to do so for
9 Métis communities. Any additional
10 supplements wouldn't be addressed
11 with this community relations
12 team."

13
14 This impression of Shell's that they are not
15 legislated to deal with Métis communities, this may
16 be as a result of Alberta's rejection of my
17 client's Statement of Concerns and Alberta is
18 informing Shell of this rejection, even when
19 Statements of Concern were filed by other groups, I
20 would suggest aren't rights-bearing. A Statement
21 of Concern is not a heavy burden to meet. My
22 clients did everything they should have done. They
23 filed their Statements of Concern, they provided
24 submissions. They even got some historical expert
25 report. They came and they spoke eloquently about

1 their use of the area and their experts spoke about
2 their use in the area and the failure of Shell to
3 provide any documentary evidence from the
4 publicly-available sources or the Métis people
5 themselves.

6 I suggest to you the evidence of my clients
7 is the elephant in the room.

8 Shell tried in rebuttal to somehow equate
9 sponsorship of golf tournaments, dinner meetings,
10 and two technical presentations that my client
11 stated were too technical and they didn't find
12 helpful. And they tried to turn this into
13 consultation on Métis traditional land use.

14 Ms. Jefferson explained their approach to TLU
15 as documenting current use. This is in Volume 15,
16 page 3773 continuing on to 3774. She said:

17
18 "And so we're looking at who
19 is there currently. Who is using
20 the land currently. Who is
21 actually in the area. That is not
22 to say that a lot of this
23 information isn't really important
24 and from an historical perspective,
25 but the assessment actually deals

1 with who's there, here, and may be
2 affected."

3

4 And this is the question:

5

6 "Q. So you're saying now, you're saying
7 who is there now, that's what Shell looked
8 at?"

9

10 "A. That's the primary basis for an
11 impact assessment, who may be impacted now by
12 the project."

13

14 And I suggest to you that the reason that the
15 historical use is so important, if you go back to
16 **Powley**, you'll see that this is the approach, there
17 is no legislated approach on how to deal with Métis
18 rights, it comes from **Powley**. Métis rights are
19 defined by the common law. Of course the common
20 law interpreting the Constitution of Canada.

21 In the case of Mikisew Cree First Nation and
22 Fort McKay First Nation, providing the capacity
23 funding to document impacts, Shell provided the
24 capacity funding, and then entered into Impact
25 Benefit Agreements. We've heard from Fort McKay

1 First Nation, and we'll hear from Mikisew Cree, but
2 they didn't participate in this hearing presumably
3 because the impacts to Aboriginal Rights were
4 documented and accommodated in accordance with the
5 Terms of Reference.

6 There can be no question that my clients have
7 credibly asserted rights. They will be impacted by
8 an approval. They are seeing the degradation in
9 the area. They are seeing their ability to live
10 off the land taken from them. They explained the
11 changes in water level, the changes in wildlife.
12 And no one can argue with the evidence, with their
13 evidence, that what was once there is no longer.
14 Who would have evidence of the changes but those
15 who experience them directly? Many, many technical
16 reports stating incrementally that these changes
17 are small with each new project did not change the
18 truth of my clients' direct observations that they
19 provided to you. They've heard decision-makers say
20 that there's no significant adverse effects, but
21 they've told you that they see significant changes.

22 Even the language of the Terms of Reference
23 suggests that Shell should have provided more
24 information about my clients.

25 And I just want to refer you quickly to the

1 Terms of Reference. And I think Mr. Denstedt
2 referred to these as well. The language of the
3 Terms of Reference speaks to accommodation and a
4 duty to consult. Page 4 of our submissions, I'm
5 restating the JRP agreement, Part III, Scope of
6 Factors.

7 And the last one I just wanted to point your
8 attention to:

9
10 "The methods and measures
11 proposed to manage, mitigate and
12 compensate to an acceptable level
13 any identified effects on the
14 asserted or established Aboriginal
15 Rights and interests."

16
17 And I would suggest to you this is impossible
18 for my clients. They have been excluded. I would
19 suggest to you even marginalized by this process.

20 The Constitution of Canada and **Powley** says my
21 clients possess rights that should be protected.
22 And I would suggest to you that's your role here.
23 And it's important. It must be done.

24 I suggest to what's happened here,
25 ironically, is that my clients who are supposed to

1 have extra protection for their rights, as they are
2 specially protected by the Constitution, they've
3 actually been afforded less consultation rights
4 than would have been afforded other stakeholders.
5 And I refer you to *Decision 2007-058* from this
6 Board. And that's the North West Upgrading
7 decision which quotes the Suncor Decision 2006-112.
8 And it states, this is page 8:

9
10 "A number of parties
11 questioned whether North West's
12 public involvement process met the
13 requirements of *Directive 056*. The
14 Board notes that *Directive 056*
15 applies directly to oil and gas
16 energy projects and not oil sands
17 upgraders. As previously noted in
18 *Decision 2006-112*, the Board
19 considers the basic elements for
20 public consultation and *Directive*
21 *056* to be the minimum public
22 participation standards that
23 mineable oil sand applications must
24 meet. The Board also considers
25 *Directive 056* to be the minimum

1 requirement for an oil sands
2 upgrader; therefore it expects an
3 applicant for an oil sands upgrader
4 to meet the consultation
5 notification requirements for
6 category E facilities in
7 *Directive 056*, Table 5.1. The
8 Board is satisfied that North West
9 has met these requirements. If
10 other information, such as the EIA,
11 indicates that parties outside the
12 minimum distances required for
13 category E facilities could be
14 impacted, the Board expects that
15 they would be part of the
16 applicant's public consultation
17 program as well."

18
19 And I would suggest to you that Mr. John
20 Grant, who came and gave evidence, is a person with
21 legally-recognized rights, legal interest in land,
22 even outside of his Métis heritage; he's a trapline
23 holder and he's also a leaseholder. The fact that
24 his trapline and access to his trapline will be
25 affected, has already been affected by some

1 projects, will be further affected by this Project,
2 *Directive 056* hasn't even been met. Nobody met
3 him. Nobody documented any conversations with him.
4 Nobody wrote it down. *Directive 056* has a lot of
5 documentation requirements.

6 So I would say ironically that the Métis, or
7 my Métis clients, have actually received less
8 consultation than even required for other
9 stakeholders.

10 Similarly, Mike Guertin and Frank LaCaille,
11 also named as interveners in their own right, and
12 also MNA members, have similar interests to John
13 Grant within the LSA and nowhere does the
14 Application mention them or their concerns; Barb
15 Hermansen as well.

16 I suggest to you that what we're seeing here
17 is a very odd result. Shell has no information
18 about Métis use specifically. Mr. Goodjohn stated
19 that there's no information about Métis Local 125,
20 their use. However, he did state, he assumed the
21 impacts would be the same as MCFN because they live
22 in the same community. I suggest to you that my
23 clients have shown that there was more Métis use in
24 the area. However, Mikisew Cree First Nation's
25 concerns have been mitigated and accommodated in an

1 Impact Benefits Agreement. My clients, however,
2 Shell says there's no Impact Benefit Agreement to
3 be had.

4 I suggest to you this is a direct result of
5 Alberta having no Consultation Policy for Métis
6 rights.

7 There are no further processes for my clients
8 after this decision is made. There's no right of
9 appeal for **Water Act**, or an approval under **EPEA**
10 where there's been a hearing by CEAA or the ERCB.
11 That's Section 95 of **EPEA**.

12 My clients are disappointed by this Panel's
13 decision before even hearing their evidence that
14 they did not want to decide or hear from my clients
15 about their constitutional rights and their duty to
16 consult. They've been left with no forum. They
17 believed, based on past experience, and, of course,
18 reading of the Notice of Hearing and reading of the
19 **Administrative Procedures and Jurisdiction Act** that
20 this is the forum where their concerns could be
21 heard.

22 Alberta, in making a motion that this Panel
23 should not take jurisdiction to consider the duty
24 to consult, has succeeded in avoiding the issue in
25 this forum.

1 I suggest to you that Shell's response, when
2 I put to them on cross, that they could have
3 provided capacity funding in order to make this
4 process easier, in order to document the impacts.
5 And their response to me, I heard a few different
6 responses. For the most part, it was that, we
7 would have provided information had the Métis
8 groups provided it to us. So then when asked about
9 capacity, Shell seemed to say, well, they didn't
10 ask for capacity. So when I showed them evidence
11 of where my clients had asked for capacity, they
12 said, well, we don't do that, that we provide Good
13 Neighbour Agreements. When asked about Good
14 Neighbour Agreements, Shell said, well, the Good
15 Neighbour Agreements are only for community-based
16 projects. They are not for oil -- they are not
17 project-specific. They are for Christmas parties,
18 they are for golf tournaments. They are for in
19 some cases they are used, and I would suggest this
20 could actually be considered double-dipping by
21 Shell, because they are used by the Locals to
22 implement community awareness programs which Shell
23 also takes credit for. So not only is the money
24 attributed to the Locals but Shell also takes
25 credit for these good works. And in all fairness,

1 the Locals are happy to work with Shell in that
2 manner, but they feel as though that funding has
3 been mischaracterized. It's not funding that's
4 provided to the Locals to use to fund their
5 organizations or to hire experts or to participate
6 in these forums. And I think the \$700,000 that was
7 quoted by my friend over six years reflects
8 \$100,000 for the *Mark of the Métis* project over
9 five years, and \$20,000 in funding for any TLU from
10 Fort Chip. So just to put those numbers in
11 perspective.

12 So I just want to finish on this note. And I
13 think Mr. Chartier summed it up quite well, and
14 also Mr. Fortna under questioning about who should
15 be consulted. It's not that hard. It's not as
16 hard as Shell makes out. It's the MNA, the
17 Regions, and the Locals are there. There's a
18 government structure. To suggest that there isn't
19 overlap between other governments, I think is
20 absurd. Obviously there's always
21 cross-jurisdictional issues between municipal,
22 provincial and regional governments. While this
23 could be the same.

24 In any event, I would suggest this morning my
25 friend misquoted Jumbo Fraser as well by saying

1 that consultation can only go through the Local.
2 And I think that's not at all what Mr. Fraser said.
3 He said that impacts need to be addressed with
4 communities, consultation needs to work through the
5 regional governments.

6 In any event, if Alberta had a Consultation
7 Policy, which was negotiated with the MNA and the
8 Region and the Locals, this would be addressed. It
9 seems unfair to put this on my clients and say, you
10 need to work all this out. It's clear that any
11 accommodation that should occur here needs to be a
12 negotiation between Alberta and my clients, and
13 ultimately with the project proponents like Shell,
14 who are, as Alberta states, and as Shell states,
15 Alberta's delegate in these processes.

16 Those are all my comments. Thank you very
17 much. If you have any questions.

18 THE CHAIRMAN: We don't have any questions,
19 Ms. Bishop, thank you.

20 Mr. Jeerakathil, did you plan on being about
21 an hour?

22 MR. JEERAKATHIL: I don't think I'll be more
23 than an hour. I might be under an hour, but I'm
24 happy to take a break now if Madam Court Reporter
25 would like one.

1 THE CHAIRMAN: We'll take 10 minutes.

2

3 (Brief break)

4

5 THE CHAIRMAN: Please proceed, sir.

6

7 **FINAL ARGUMENT OF THE FORT MCMURRAY #468 FIRST NATION, BY**

8 **MR. JEERAKATHIL:**

9 MR. JEERAKATHIL: Thank you. Good afternoon,
10 Mr. Chairman, Panel Members.

11

12 **I. INTRODUCTION**

13 To begin, I have a bit of housekeeping. I
14 have a request from my client due to concerns
15 expressed in their community to redact the maps
16 contained in Exhibit 011-002, and Exhibit 011-009,
17 Figures 1 to 9, from the public portion of the
18 Registry. They would still be full exhibits on the
19 record, but just in terms of them being accessible
20 from the public that they be redacted in that
21 respect.

22 I've spoken to my friend from Shell,
23 Mr. Denstedt, and I understand that Shell has no
24 objection to that taking place.

25 THE CHAIRMAN: Any other comments with

1 respect to the motion? Mr. Perkins?

2 MR. PERKINS: We, and when I say "we," I
3 mean the Secretariat, we've seen the request from
4 Mr. Jeerakathil's client. The one concern we have,
5 sir, and I apologize that we don't have an answer
6 for you, there is an obligation under the statute
7 for an internet-based Registry to be provided in
8 relation to the hearing, sir, and we're just trying
9 to develop an understanding of whether redacting
10 evidence in the hearing, that is, not making it
11 available on that internet Registry, is something
12 that would be a problem with the statute. And I
13 wonder if we might beg your indulgence on that and
14 we'll work on it a little bit more and maybe come
15 back to you if you would be inclined to take
16 Mr. Jeerakathil's request under advisement.

17 THE CHAIRMAN: Yes, let's do that.

18 MR. JEERAKATHIL: Certainly. Thank you.

19

20 **B. Fort McMurray First Nation**

21 To begin, Mr. Chairman, the Fort McMurray
22 First Nation is a Cree and Chipewyan First Nation
23 whose traditional territory includes the area of
24 the proposed Jackpine Expansion.

25 Fort McMurray First Nation is a signatory to

1 Treaty 8, which was signed in 1899, which gives it
2 certain rights under that Treaty, and Canada has
3 made certain covenants with respect to that First
4 Nation.

5 Please be advised that the reason why the
6 Fort McMurray First Nation did not seat a panel in
7 this proceeding, even though it did file evidence,
8 was solely because of financial reasons. It wasn't
9 a reason not to participate in the process or not
10 wanting to participate in the process, but, as you
11 can gather, it's a very expensive process,
12 particularly if you want to do it correctly. And
13 certainly they could have come down unrepresented
14 and done something, but that wasn't viewed as an
15 appropriate way to participate. This is a very
16 technical and legal proceeding. And so that is the
17 reason why they didn't participate with respect to
18 a panel.

19 The Band did receive some CEAA funding but it
20 was limited, and it did not get capacity funding
21 for the studies that it did do, from the Proponent.

22 But please rest assured that we have been
23 reviewing the transcript remotely on a daily basis
24 and been participating that way in the proceeding
25 in a lower cost way.

1 With respect to the evidence on the record,
2 my friend made some comments about it. We agree it
3 is untested but we submit it should still be
4 afforded some weight by the commission. And these
5 are the reasons why. With respect to
6 Exhibit 011-002, the maps contained in that
7 Exhibit, and Exhibit 011-009, which is the report
8 that was prepared, the maps contained in that
9 exhibit, those are part of, and Shell's admitted
10 this, are part of a study that was commissioned by
11 Shell in 2006. They are the same dataset. They
12 are just points that weren't included in the 2006
13 report because it was for a more southern project.
14 So we submit that even though that evidence is
15 untested it is reliable from a hearsay perspective,
16 and is part of a document which Shell has funded in
17 the past and has been published.

18 I'm not suggesting that, you know, the
19 greater weight couldn't have been given if there
20 was cross-examination involved, but I'm saying with
21 respect to the reliability of the evidence, it is
22 reliable. And the exception, this Panel can listen
23 to hearsay, it's not bound by the Rules of
24 Evidence, particularly the Energy Resources
25 Conservation Board, Section 27 of that Act, but it

1 can rely on that evidence as reliable even though
2 it's not adopted.

3 With respect to the disturbance analysis
4 contained in Exhibit 011-009 by MSES, again we
5 would submit that even though that isn't tested,
6 there are elements of it that are reliable enough
7 for the commission or the Panel to rely on, in
8 particular the methods used to create that analysis
9 are the same as were used to create the ACFN
10 Exhibit 006-013-0. And that was subject to
11 cross-examination. So although the exhibits are on
12 the record, and not tested, I submit they are
13 reliable in that respect and the Panel could rely
14 on them if it choses to do, and, in my respectful
15 submission, should give them some weight.

16 Similarly, the affidavits of Alden Cree,
17 Exhibit 011-003, and Phillip Cheecham, 011-002, are
18 sworn statements in Affidavit form, which are
19 routinely admitted in regulatory proceedings
20 without being formally adopted because they are
21 sworn statements. Granted they haven't been tested
22 by cross-examination. I grant that.

23 And according to the Rules of Practice of the
24 ERCB, Section 16, you can receive Affidavit
25 evidence.

1 And so in my submission, they aren't untested
2 to the extent that I've described those documents,
3 they are reliable to that extent, and, in my
4 submission, have some weight for the Panel to
5 consider.

6 In our submission, Mr. Chairman, and you
7 heard some of this from my friend earlier,
8 Ms. Bishop, with respect to the Métis, I think Fort
9 McMurray is in a similar situation, although
10 they've received no capacity funding. And I'm not
11 going to talk about that a lot, but I did want to
12 say that, in our submission, this sets a low
13 watermark for Aboriginal consultation for such a
14 project of this magnitude.

15 This is a project that is \$9 billion, was I
16 think the capital cost estimate, nine to ten, nine
17 to twelve. That's a significant amount of capital,
18 no question about it. And despite that, there are
19 only, quite frankly, a handful of Aboriginal groups
20 involved here. This isn't Enbridge Northern
21 Gateway where there's 150 Aboriginal bands
22 involved. There are five First Nations and it
23 seems like one or two Métis groups. That is
24 completely achievable from an Aboriginal
25 consultation perspective. And in my submission,

1 respectful submission, Shell should have engaged
2 all of them in the appropriate way, and did not.
3 And, in my submission, this sets a low watermark.

4 The amount to spend to do a proper study in
5 this case for Fort McMurray and the Métis as well,
6 based on that kind of capital cost is rounding
7 error, it's not even rounding error, it's
8 zero percent of the cost almost. It's four decimal
9 places of a zero and then a one.

10 And it's necessary for the process. It isn't
11 up to the Bands to create the studies and then
12 bring them and then ask for further study. They
13 don't have the capacity to do that. There's a lot
14 of development going on. It's up to the Proponent
15 to study that. And the point is that Fort McMurray
16 was very willing to study that but wasn't given the
17 opportunity to.

18

19 **C. Project**

20 With respect to the issues list, I'll move on
21 to that now, I intend to discuss Section A1, which
22 is the adequacy of Shell's assessment methodology;
23 A2, the significance of Project effects; B5, C and
24 I, terrestrial resources and cumulative effects,
25 although cumulative effects much less; and B7,

1 impacts on Aboriginal groups and consultation.

2 I notice the issues list didn't contain a
3 section dealing with alternatives to the Project
4 and I'll be making some minor submissions on that
5 as well. I may touch on other issues because there
6 is overlap. I hope to be relatively focused. To
7 the extent I don't deal with all the issues, that
8 doesn't mean we don't care about them or don't
9 support the other interveners on them, it simply
10 means we are leaving those to them to argue and
11 trying to be as focused as we can in our argument
12 with respect to how we participated in the
13 proceeding.

14

15 **II Adequacy of Shell's Assessment Methodology**

16 So let's talk about Shell's Assessment
17 methodology first. The Terms of Reference of the
18 Joint Review Panel on page 12 talk about how you're
19 supposed to consider that, Part II - Scope of the
20 Environmental Assessment: In Part II on
21 page number 11, it says:

22

23 "The Joint Review Panel shall
24 conduct an assessment of the
25 environmental effects of the

1 project based on the Scope of
2 Project."

3

4 In 2, it says:

5

6 "The assessment shall include
7 a consideration of the..."

8

9 Following factors:

10

11 "a. the environmental effects of
12 the Project..."

13

14 And it goes on:

15

16 "... and any cumulative
17 environmental effects that are
18 likely to result from the project
19 in combination with other projects
20 or activities that have been or
21 will be carried out;"

22

23 And then 2.b:

24

25 "b. the significance of the

1 effects referred to in
2 paragraph a."

3
4 So this issue is clearly very relevant to
5 your mandate.

6 And on methodology we submit two concerns
7 that we have with the methodology that Shell has
8 used.

9

10 **B. Regional Study Area**

11 First, we say that the size of the RSA is
12 inappropriate and too large, and the LSA is
13 inappropriate given the size of the footprint.

14 And two, we submit that Shell failed to
15 appropriately consider the ecological context for
16 both terrestrial resources and Aboriginal and
17 Treaty impacts, rights, and use of land.

18 So dealing with the first one, the Regional
19 Study Area. We submit that this Regional Study
20 Area was initially set out for two projects, Pierre
21 River and Shell Jackpine Expansion, and it's too
22 large with respect to the one project. For
23 example, you might take judicial notice of the fact
24 that the Kearl Oil Sands Project had an RSA for
25 terrestrial resources of 1,195,956 hectares, and

1 that's at Volume 3, page 7-12 of that EA, whereas
2 this RSA is a million hectares greater for a
3 project that is actually smaller in bitumen
4 production.

5 I think that's a problem, in our submission,
6 with respect to the RSA.

7 In effect, an RSA is supposed to delineate
8 the furthest measurable effect of the project in
9 the area, in our submission, so you define the RSA
10 based on the furthest measurable effect. And this
11 defines the RSA on the furthest measurable effect
12 potentially of two mines, not the Jackpine alone.

13 And so we submit what the issue with that is
14 is simple: If the RSA is too big, it's easy to say
15 there are no impacts or all the negative impacts in
16 the RSA are negligible because it's such a large
17 area. It's a pretty simple exercise, the larger
18 the RSA gets, the lower the environmental
19 consequences become. And so it's vital that the
20 RSA be set out in an appropriate manner, and we
21 submit it has not been.

22

23 **C. Local Study Area**

24 The Local Study Area. Shell's LSA is
25 slightly larger than the disturbance footprint. I

1 think there's a 500-metre buffer around the
2 disturbance. We submit that Shell should have
3 chosen a larger LSA. And that's because basically
4 the entire LSA is disturbed, given their analysis.
5 And then they argue that because the entire LSA is
6 disturbed and there are significant environmental
7 effects on terrestrial resources within the LSA,
8 you shouldn't pay any attention to that, what's
9 important is the RSA. I submit that that's a type
10 of sleight of hand, it's a neat trick, but it
11 should be rejected. Because the Total panel, for
12 example, and OSEC pointed this out in
13 cross-examination, that significance effects are
14 supposed to take place in the LSA, and cumulative
15 effects assessments within the RSA.

16 And what they've done is sort of turned that
17 around a little bit and said, well, the LSA should
18 be, you know, there are significant effects but
19 don't really pay attention to that because, I think
20 the analogy was, if you build a shed, of course the
21 imprint of the shed is going to be impacted. But
22 that isn't the way it should be. I think the LSA
23 should have been larger. If the LSA had been
24 larger, the problem they have in that circumstance
25 is that there still would have been significant

1 adverse environmental effects but they couldn't
2 have said "don't pay attention to them" because
3 they would have been significant because of the
4 other developments.

5 And so we submit that, and in particular, the
6 panel in Total indicated what I just said at
7 page 44 of their Decision with respect to
8 considering significant effects in the LSA and
9 cumulative effects in the RSA.

10 So we submit that that is a fundamental
11 problem with the way the determinations are made,
12 and should be rejected.

13

14 **D. Failure to Properly Incorporate Ecological Context**

15 The second concern that we have with the
16 methodology is the failure to properly incorporate
17 ecological context. And here is our concern there.
18 We submit that in the context of the area in the
19 area of the disturbance, as is reflected in the
20 documents, and I'd like to refer to a few,
21 Figure 2.4-1 in Exhibit 001-051H, Exhibit 011-009,
22 and Exhibit 006-0130, which are the disturbance
23 analysis I've spoken about earlier done by MSES.
24 And Figure 7.2-2, which is Exhibit 001-001-E, and
25 Exhibit 001-014, which are the Alberta Government

1 project maps which I had entered during
2 cross-examination. I'm just going to refer to
3 those generally as "the disturbance exhibits," so
4 I'm not going to go through them again.

5 But I think if one looks at those documents
6 in a realistic way, it will show that the entire
7 LSA will be disturbed. And there was an admission
8 on cross-examination by Canada that 1.42 townships
9 of land are currently going to be disturbed.
10 That's at Volume 7, page 1219, undertaking 18 --
11 sorry, actually that was an undertaking response.

12 And given that impact that you will see if
13 you look at those exhibits, there's three or four
14 simple exhibits, just look at them in a clear way,
15 I think it's clear that the admission by Shell that
16 the area has been adversely affected by human
17 activities is correct. They've admitted that. And
18 that's obvious from the disturbance exhibits I've
19 just mentioned.

20 And that admission, which took place at
21 Volume 3, page 372, line 6, with respect to the
22 area being adversely affected by human activities,
23 is an important one, because Shell also accepted
24 the methodology contained in Exhibit 011-015 which
25 is a reference guide determining whether a project

1 is likely to cause significant environmental
2 effects. And they accepted that at Volume 3,
3 page 375, line 17.

4 Although we now have agreement by Shell that
5 this methodology is correct, and that the area is
6 affected by human activity, which is obvious from
7 the exhibits, they failed to factor that in
8 appropriately into their rating system for the
9 assessment of environmental consequences, in our
10 submission.

11 And they discussed that in cross-examination,
12 but it appears in the September 2012 Responses,
13 Exhibit 001-063, where they indicated, they said
14 this. They said:

15
16 "All of these criteria..."

17
18 And they listed:

19
20 "... direction, magnitude,
21 geographic extent, duration,
22 reversibility, frequency..."

23
24 Were included in the rating. But they said:

25

1 "All of these criteria were
2 included in the assessment
3 environmental consequences rating
4 system, except ecological context."

5
6 We submit that's a significant error in light
7 of the fact of the disturbance in this area,
8 particularly in the Existing Developed Case, the
9 Application Case and the Planned Development Case,
10 all of which show significant disturbance in that
11 area. That is one of the key concerns with
12 development in this area is the imprint of the
13 development, and the impact of human activities.
14 Without a doubt, that is one of the most important
15 criteria and we think it should have had a greater
16 role. They said they considered it through
17 professional judgment. But something like that, in
18 our submission, should have had more of a
19 quantitative impact on that criteria.

20 You cannot exercise professional judgment by
21 assuming away the problem within the analysis, in
22 our submission. So we submit that the failure to
23 consider ecological context in that respect casts a
24 shadow on the results of the effects analysis in
25 the RSA. And I'll be talking about that a bit

1 later.

2

3 **E. Impacts on Terrestrial Resources**

4 With respect to impacts on terrestrial
5 resources and effects determinations, which is the
6 next step of this argument that we're making, we
7 submit that the Panel in its consideration should
8 consider effects determination prior to reclamation
9 taking place with respect to effects
10 determinations. And that's because there's very
11 little reclamation actually taking place now and we
12 don't know what the results of that reclamation is
13 going to look like in a real concrete way.

14 There isn't enough evidence to say that
15 reclamation will be successful or not. And my
16 friend this morning talked about risk. And the
17 question is one of what is a reasonable risk? Some
18 things are reasonable and others are not. And, in
19 our submission, to say that reclamation will be
20 successful, I think is a risky proposition.

21 In Exhibit 001-051-E in Table 4.4-1, I had a
22 discussion with Shell about that table and its
23 meaning. It's called "Wildlife Abundance," but if
24 I understood their answer correctly, it was really
25 more about wildlife mortality due to interaction

1 with infrastructure. If that's correct, then
2 that's fine. If the argument is that a 500-metre
3 buffer, on the other hand, around a surface mining
4 area is appropriate to maintain wildlife abundance,
5 then we submit that that notion should be rejected.

6 With respect to the impacts contained, the
7 effects impacts contained in Table 4.4-2 in
8 Exhibit 001-051-E, many of the effects on species
9 of concern to my clients, the large mammals in
10 particular, and animals that can be trapped, are
11 significant in the LSA. And we submit that that
12 means that there are going to be significant
13 adverse environmental effects from the Project.

14 With respect to the RSA determinations, they
15 are typically listed as negligible. We submit that
16 that's incorrect. And the reason why we say that's
17 wrong is for the reasons we cited earlier in our
18 criticism of the methodology.

19 The first being that the RSA is too large, so
20 it's easy to say that the effects are going to be
21 negligible to the terrestrial resources in such a
22 large RSA. We say that should be rejected.

23 And the second is the ecological context
24 issue. We don't think that was appropriately
25 considered in the methodology resulting in those

1 effects determinations within the RSA.

2 So we submit that the impacts in the RSA, if
3 one considers those emissions, are significant.
4 And if one looks at the disturbance exhibits, which
5 make up a fairly large, if you look at the
6 disturbance in those exhibits that I've referred to
7 earlier, there's a significant part, even of the
8 very large RSA, that's already disturbed, and in
9 the Planned Development Case, it's going to be more
10 disturbed.

11 There's been discussion about planned
12 development versus pre-industrial cases and those
13 are very useful concepts, particularly for my
14 clients who were here before there was industrial
15 development and have lived through industrial
16 development. But even if one doesn't look at those
17 and just looks at those disturbance exhibits, which
18 I ask you to look at again and again, I think you
19 can say that there's significant disturbance in the
20 area already, and here's more coming, and as a
21 result of that ecological context, we're going to
22 have significant environmental impacts in the RSA.

23

24 **F. Impacts to Aboriginal and Treaty Rights and the**
25 **current use of lands for traditional purposes**

1 Last point on this argument, this line of
2 argument, the footprint of the Expansion of the
3 Jackpine Mine was set out in Figure 1-1 in
4 Exhibit 001-001-A, which is Volume 1, as being
5 15,900 metres cubed per day, that's the capacity.
6 The original Jackpine Mine was 31,900 metres cubed
7 per day. The area of the Jackpine Expansion it
8 looks like it's almost double the area of the
9 original Jackpine Mine. And I asked some questions
10 about this to Shell to explain why that was the
11 case, and I don't think they, at least from my
12 perspective, answered those questions in a way that
13 I could intelligently understand. And that was in
14 Volume 3, page 363 to 365. And I think what we've,
15 what I conclude from that is simply that with
16 respect to the Jackpine Expansion, we've got twice
17 the disturbance, twice the environmental impact for
18 half the bitumen product. That's what I gather
19 from that line of cross-examination and those maps.

20 With respect to impacts to Aboriginal and
21 Treaty Rights in current use of lands for
22 Aboriginal purposes, the Terms of Reference
23 contains a lot of language, as does the new
24 ***Canadian Environmental Assessment Act (2010)*** in
25 Section 5 about impacts to Aboriginal peoples. So

1 this is clearly a very important part of your
2 mandate.

3 In particular, on pages 5 and 6 of the Terms
4 of Reference under "Aboriginal Rights and
5 Interests", it says the Joint Review Panel may
6 receive information about Aboriginal groups and
7 rights. And then it goes on to say on page 12,
8 Part III that the assessment by the Joint Review
9 Panel shall also include a consideration of the
10 following additional matters. And it includes
11 effects of the project on asserted or established
12 Aboriginal and Treaty Rights and community
13 knowledge and Aboriginal traditional knowledge
14 received during the Joint Review.

15 And then it says (as read):

16

17 "The Joint Review Panel shall
18 consider:

19

20 ...

21

22 - Any potential effects on
23 uses of lands and resources
24 by Aboriginal groups for
25 traditional purposes;

1 - Any effects (including
2 the effects related to
3 increased access and
4 fragmentation of habitat) on
5 hunting, fishing, trapping,
6 cultural and other
7 traditional uses of land ...
8 as well as related effects on
9 lifestyle, culture, health
10 and quality of life of
11 Aboriginal persons."

12

13 It goes on:

14

15 "- Any effects of
16 alterations to access into
17 areas used by Aboriginal
18 persons for traditional uses;
19 - Any adverse effects of
20 the project on the ability of
21 future generations to pursue
22 traditional activities or
23 lifestyle;
24 - Any effects of the
25 project on heritage and

1 archaeological resources in
2 the project area that are of
3 importance or concern to
4 Aboriginal groups;

5
6 - The methods and measures
7 proposed to manage, mitigate and
8 compensate to an acceptable level,
9 any identified effects on asserted
10 or established Aboriginal rights
11 and interests."

12
13 Yet the Terms of Reference are full of this
14 type of language, and, in my submission, the
15 Application doesn't go to meet those Terms of
16 Reference. And we submit that impacts to Treaty
17 Rights and current uses of land for traditional
18 purposes by Aboriginal persons are significant and
19 adverse, as we've submitted earlier that the
20 impacts to terrestrial resources are significant
21 and adverse.

22 I think we still have to consider the
23 ecological context when we're talking about
24 assessing an impact to an Aboriginal Right or the
25 current use of lands by Aboriginal persons, because

1 it is, in effect, an environmental effect that
2 we're talking about. And the ecological context
3 wasn't discussed by Shell at the hearing. I didn't
4 see it contained in a significant way in the
5 Application.

6 The ecological context is one of heavy
7 disturbance. The First Nations peoples culture and
8 use of the land is fragile. It is, you know, an
9 area that's been impacted heavily by human
10 activity. And we are not talking about the
11 socio-economic benefits of the Project and the
12 jobs. And I'm not saying that that is bad, no, I'm
13 not. And I agree with Shell, with people that say
14 that that's a benefit. I can't deny it. And it's
15 a big one, I think, in the area. But the question
16 is, that isn't what we're talking about when we're
17 talking about impacts to culture, though. We're
18 talking about use of the land. We're talking about
19 the ceremonies and those types of things. Those
20 are the types of things that have been eroded and
21 that are of concern in an EA, and that the Terms of
22 Reference talk about.

23 Certainly Shell might argue we're spending
24 nine to twelve billion dollars here, this is of
25 economic benefit. We think there's got to be a

1 limit at some point in time, but that isn't for the
2 Panel to consider, in our submission, perhaps it's
3 part of the ERCB's public interest jurisdiction.
4 But under CEAA, in any event, that decision is to
5 be made by the Minister or the Governor in Council,
6 taking into account those effects and those
7 economic matters. And when we're looking at
8 culture, I don't think we can say that it's
9 compensated by these jobs, that's not the point of
10 the analysis. If that's in fact going to be the
11 decision of the Governor in Council, fine, let him
12 make that decision, but that's not part of the EA.

13 There is no study with respect to culture.
14 The areas over which the rights are exercised in
15 Fort McMurray's traditional territory are severely
16 restricted, not just because of a loss of animals
17 and plants but because of a lack of access to these
18 areas due to mining. Although public access is
19 provided, we understand, in areas where no active
20 mine exists, as clarified by Shell, there are many
21 active mines in the Project area, and with respect
22 to the Planned Development Case, limiting access.
23 And the affidavits of Alden Cree and Philip
24 Cheecham set out some information about concerns
25 about access.

1 And although Shell said that there was
2 readily available access, that hasn't been clearly
3 set out in the Application. I don't see anywhere
4 where it's clear how someone might access these
5 areas, what areas are going to be available, what
6 areas are not going to be available, that could
7 have been set out, that wasn't set out. There
8 isn't enough information about that, and the
9 conclusion is simply, in my submission, that access
10 will be further restricted. Despite efforts
11 potentially to allow some access, it's a surface
12 mine, so there's going to be impacts to access, and
13 not just the impacts to the species but to access
14 as well, which is an impact to the exercise of the
15 right.

16 So we submit that it follows that significant
17 adverse impacts from the Project will exist on
18 Aboriginal Treaty Rights and current use of land in
19 both the LSA and the RSA. We say that with respect
20 to the LSA because it's being completely disturbed
21 just about, so there has to be significant adverse
22 impacts. If there are to terrestrial resources
23 that are harvested then there are to the First
24 Nation Rights in that circumstance. They are in
25 the RSA. If one simply looks at the disturbance

1 exhibits that I've referenced earlier, and looks at
2 the disturbance in that area, which we submit of
3 course is too large for the purposes of the EA, the
4 impacts are great. And we submit that we might as
5 well call a spade a spade here and say that the
6 impacts are significant so we can then at least
7 deal with them, if we need to. But I think that
8 point is an important one that should be accepted.

9 We are talking about significant adverse
10 effects here. And maybe there's a way to deal with
11 them. But we might as well not say they're not
12 significant, as Shell is urging you to do.

13 I'd like to speak a little bit about some
14 previous decisions of CEAA panels and their
15 consideration of Aboriginal concerns in their
16 decisions. In particular, and I can provide these
17 if they are not available, I've spoken to
18 Mr. Perkins about that. In the Kemess North Copper
19 Gold Mine Project Joint Review Panel Report, which
20 is September 17th, 2007, that project, which was a
21 copper mine, was denied and one of the main
22 contributing reasons was risks to culture.

23 The analysis is stated at page 245 of that
24 report, Risks to Aboriginal Culture. The JRP noted
25 that there would be a long-term negative

1 environmental legacy for the Aboriginal peoples
2 living in the area, and given, in our submission,
3 the pace of development in the Athabasca Oil Sands
4 Region, that case is relevant. It's relevant
5 because that is the legacy that will be left once
6 the mining is done, is what's left for the
7 Aboriginal people. It's a consideration that that
8 panel used in denying that project. We submit it
9 applies equally here today.

10 The Panel in Kemess Ness (sic), also at
11 page 246, had a concern about the proponent failing
12 to engage Aboriginal people in the region. And I
13 don't know why, but for this Project, in my
14 submission, as I mentioned earlier, I think it's a
15 low watermark for Aboriginal participation. We
16 have a lot of opposition. There have been
17 agreements I think with Mikisew and Fort McKay, but
18 ACFN is opposing, Fort McMurray is opposing, the
19 Métis are opposing. That's not a lot of
20 stakeholders. That's only a handful of
21 stakeholders and half are opposing.

22 I submit that's significant Aboriginal
23 opposition. It's not that much different than
24 Kemess Ness (sic), in my submission. It's a
25 different project, and my friend may argue that,

1 and that's fair, but the principles are the same,
2 in my submission.

3 The panel in that case specifically stated at
4 246 (as read):

5
6 "The Panel simply observes
7 that having such agreements in
8 place at the outset of a Panel
9 review is strongly recommended, and
10 that failure to conclude such
11 agreements in advance puts a Panel
12 in a difficult position in any
13 situation where the Project under
14 review could substantially affect
15 Aboriginal interests."

16
17 And we're not speaking about a project with
18 marginal economic viability that may have
19 difficulty to engage Aboriginal groups, which was
20 the case I think in Kemess Ness (sic), we're
21 talking about a large multi-national blue chip
22 company.

23 Similarly, in the Whites Point Quarry and
24 Marine Terminal Joint Review Panel Report of
25 October 7th, 2007, which took place in Nova Scotia,

1 one of the main factors for rejecting the project
2 was respect for traditional and community
3 environmental knowledge. In particular, the Joint
4 Review Panel noted at page 101:

5
6 "The Panel believes that the
7 assessment would have benefited
8 from more effective integration of
9 traditional community knowledge
10 into the EIS. The public
11 consultation employed by the
12 Proponent was not effective in
13 creating a transparent process
14 where community members felt that
15 they could openly and freely
16 express their opinions and concerns
17 about the Project. Consequently,
18 for example, information on..."

19
20 Sorry, I'll skip that.

21
22 "The Proponent failed to
23 incorporate vital information into
24 its consideration of alternatives
25 or into its project design."

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And at page 103:

"A primary consideration influencing the Panel's decision to recommend rejection of this Project is the adverse impact on a Valued Environmental Component: the people, communities, and economy of Digby Neck and Islands. This region of Nova Scotia is unique in its history and in its community development activities and trajectory. Its core values, defined by the people and their governments, support the principles of sustainable development based on the quality of the local environment. Local residents are deeply embedded within and dependent on the terrestrial and marine ecosystems of this region: human health and well-being is intrinsically linked with the viability of the ecosystem."

1

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And that can be equally said for the
Aboriginal peoples, including my client, in this
area of Alberta.

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And, finally, the last authority is, or
decision is the Prosperity Gold Copper Mine Review
Panel of 2010 where the panel, in denying that
project for a number of reasons, but including
First Nations issues, said at page 2 of the
Executive Summary:

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"The Panel concludes that the
Project would result in significant
adverse environmental effects on
fish and fish habitat, on
navigation, on the current use of
the lands and resources for
traditional purposes by First
Nations and on cultural heritage,
and on certain potential or
established Aboriginal rights or
title."

It goes on at page 3 to talk about a
reduction in use areas being a significant impact.

1 And on page 4 of the Executive Summary as well,
2 which I won't read into the record, you can refer
3 to those.

4 But what I'm saying is this isn't just noise
5 any more. In the previous panel decisions, I
6 submit, that they weren't given, these types of
7 interests weren't given the proper consideration
8 that they should have. But that's changing. We're
9 growing as a society. We're seeing that these are
10 actually valued, and the Terms of Reference of the
11 Panel set that out clearly, in my submission.

12 These are reasons to deny projects if these
13 are impacted, these types of rights are impacted
14 significantly or not studied properly. And in my
15 submission, you have both here, particularly with
16 respect to my clients, Fort McMurray First Nation.
17 And I think the Métis made some comments about that
18 as well.

19

20 **G. Consultation and Impacts to FMFN**

21 And I would like to talk a little bit now
22 about, this is my last area, about that
23 consultation dialogue between my client and Shell.

24 In our submission, Shell has admitted on the
25 record in numerous places that Fort McMurray has an

1 interest in the Project area. The evidence on the
2 record indicates that Fort McMurray has use in the
3 RSA and very close if not within the LSA itself.
4 These are subject to significant developments in
5 the Application Case. The LSA is drawn around the
6 mine footprint. We submitted earlier that that
7 should have been a larger footprint. And had it
8 been, it would have included my clients probably
9 within some of their traditional use points, but it
10 wasn't, it was smaller. But they are contained
11 within the RSA but for some reason that isn't
12 relevant now. It was Shell's RSA that they chose.
13 And my clients have use in that RSA and very close
14 to the Project area, if not in the Project area,
15 yet they weren't provided the ability to study
16 impacts to their rights, which are of great concern
17 to them.

18 The exhibits of Fort McMurray, the maps that
19 I've referred to earlier, which we submit you can
20 pay attention to, in Exhibit 011-009 and 011-002,
21 show that the Project is located in the northern
22 part of what's -- that isn't the territory of the
23 Nation, that is those areas identified as the
24 northern end of that area is simply based on the
25 2006 study and the limits defined therein. But

1 that study was with respect to a southern project,
2 so they didn't go further, in my submission.

3 McClelland Lake, for example, is an important
4 site to the First Nation, which is very close to
5 the LSA, and that's contained in that information
6 that I've referred to in the Fort McMurray
7 exhibits.

8 Effectively the data points in those exhibits
9 are based on mapping layers that were currently
10 available for the 2006 study, and all we did was
11 include some of those in those maps, whereas they
12 weren't included in the 2006 study because the maps
13 just didn't go far north enough. So we just used
14 that same data in the 2006 study and plotted it
15 later on. But that doesn't mean that that's the
16 extent of the traditional use of Fort McMurray.
17 No. We provided that information to say, because
18 Shell was saying to us, you don't have use there
19 and we need you to show us how you do. We said,
20 okay, we can, we don't have a lot of resources, so
21 here you go, here's the 2006 data that you
22 commissioned and it shows all these data points in
23 the north around the area, so can we get some
24 capacity assistance to study this properly so that
25 you for your EA for your Project can determine the

1 impacts, which is your obligation, which is Shell's
2 obligation, in your EA, in Shell's EA. But that
3 was refused.

4 And if you look at the maps attached to
5 Exhibits, which are the affidavits, 011-004 and
6 011-003, Philip Cheecham and Alden Cree, you will
7 see where they have noted their use is beyond the
8 data points further north along the Athabasca in
9 around McClelland Lake. So even just those two
10 affidavits show further data which Shell should
11 have said, okay, there's different data here, maybe
12 we need to study this. But just those two
13 affidavits show the use in greater areas.

14 It is ironic, Mr. Chairman, that although
15 Shell came to this area with its first Muskeg River
16 project, if I have that correct, in the mid-1990s,
17 it's ironic that it has assumed the role of
18 deciding the validity of Fort McMurray's claims to
19 impacts in the area despite Fort McMurray being
20 there for thousands of years. I submit that's very
21 ironic. But that's what we have.

22 Another reason why it isn't appropriate
23 necessarily to rely on older data with respect to
24 traditional use is because traditional use isn't a
25 constant thing in one particular area. It moves

1 around. And because of certain rights under the
2 NRTA, and I guess this is all the Treaty 8 area,
3 people can hunt and trap in different areas, and
4 often is the case that particularly in an area like
5 this, which has significant human disturbance, you
6 will see people using areas that they perhaps
7 hadn't used before because they are available and
8 the ones that they had used previously are no
9 longer available. But the point is that that
10 traditional use is an evolving concept, which is
11 why you can't just do a study and rely on it for
12 10 years, why you have to continue to update it
13 because sometimes, as Shell has argued, we will
14 have areas that are currently being mined that are
15 going to be reclaimed. Well, if they are
16 successfully reclaimed, and animals go there, then
17 traditional users may go there, and that may shift
18 their pattern, which is why it's important to study
19 the impacts on an ongoing basis and for
20 consultation to be ongoing, and assessment to be
21 ongoing. But that wasn't done here.

22 What the Application has done is assumed the
23 impacts to Fort McMurray are the same as for other
24 First Nations that were studied, but that isn't the
25 case. And that assumption isn't proper in the

1 context of an EA, in my submission.

2 And this doesn't result from a lack of
3 cooperation by Fort McMurray First Nation with
4 respect to EA. They were happy to meet with Shell
5 to do an EA, but the point was, and Shell in
6 fairness confirmed this on the record, that they
7 weren't prepared to provide capacity assistance
8 because they didn't view there to be any impacts.
9 I'm not sure how they came to that conclusion. I'm
10 not sure why they wouldn't have just said, well,
11 this group is claiming rights, they've been here a
12 long time, we should study them, we have a large
13 project, this isn't going to be a significant cost,
14 and it's needed for the EA. That to me would have
15 been the best decision. I can't for the life of me
16 understand why that decision wasn't taken. But it
17 was not. And so the Panel doesn't have that
18 information.

19 And I think that's a problem with the record
20 that Shell has.

21 The record is clear that Fort McMurray has on
22 numerous occasions attempted to provide information
23 to Shell to have this matter studied. And I've
24 referred to some of the exhibits, Exhibit 011-005,
25 which is a letter by us, which contained the

1 affidavits and the maps, which are Exhibits
2 011-003, 011-004 and 011-002, and our letter
3 setting out the concerns of the Nation in those
4 exhibits.

5 In addition to failing to engage with respect
6 to capacity for the study of effects, there has
7 been no socio-economic benefits provided to Fort
8 McMurray as there have been to perhaps other
9 stakeholders. They had one time contributed to the
10 Consultation Initiative, the IRC, but stopped that
11 in I believe 2010. I'm not sure why, but they did.

12 So to conclude that line of argument, we
13 submit that it isn't for Fort McMurray to establish
14 rights for the purposes of the EA. The Band, which
15 is not a wealthy Band, has done what it can in this
16 process to try to assert its rights for the Panel's
17 consideration. But in effect, it's Shell's onus as
18 part of its EA and the Panel's onus as part of its
19 Terms of Reference to consider impacts to those
20 rights and, in my submission, Shell has failed to
21 do that and provide that information to the Panel.

22

23 **H. Delay and Other Conditions**

24 So our client's position is that the
25 Application should be denied at this time due to

1 the concerns that we've outlined.

2 If the Panel disagrees with that and agrees
3 to approve the Project, we submit that in order to
4 prevent significant adverse environmental effects
5 from occurring to terrestrial resources and the use
6 of land by Aboriginal peoples for traditional
7 purposes and Treaty Rights, the Joint Review Panel
8 should recommend a condition that the Project be
9 delayed for a period of 10 years.

10 And I submit that's a reasonable condition
11 given the pace of development in the oil sands.
12 And I'll tell you why. There was a question asked
13 by the Panel in SIR-7 about an alternative and
14 delay and I had some discussion with Shell about
15 this in cross-examination. And I submit that the
16 following points support such a condition, and we
17 submit it's necessary to avoid significant adverse
18 environmental effects and so is within the Terms of
19 Reference of the Panel:

20 Shell did not perform an analysis of the
21 economic impacts of delaying the Project for a
22 period of time, such as 10 years, as confirmed in
23 cross-examination. We submit that positive
24 environmental benefits would result from delaying
25 the Project. That discussion took place at

1 transcript Volume 3, page 335.

2 Shell admitted that oil prices will likely
3 continue to remain strong over the longer-term, as
4 confirmed by Shell at transcript Volume 3,
5 page 336.

6 We submit that pipeline capacity in the
7 medium term remains questionable at the present
8 time.

9 We submit the Jackpine Mine will continue for
10 its useful life until 2030, which will coincide
11 with the Muskeg River Mine, and the resources
12 between those mines can continue to be shared over
13 the lives of those mines, as confirmed by Shell at
14 transcript Volume 3, page 331.

15 The resource contained in Lease 13 will
16 eventually be utilized by Shell, just at a later
17 date. The lease costs associated with that lease
18 were confirmed in an undertaking, and aren't that
19 significant: \$185,000 in 2012. \$1.170 million in
20 2020. And \$3,750,000 in 2025.

21 We submit that we would ask for a condition
22 to delay the Project if it's approved.

23 We would also ask that a condition be put on
24 any approval that Shell consult with Fort McMurray
25 First Nation and complete a traditional use study

1 with respect to impacts from the Project on Fort
2 McMurray's rights and file the same within six
3 months prior to construction commencing.

4 Mr. Chairman, those are my submissions,
5 subject to any questions you and the other Panel
6 Members may have.

7 THE CHAIRMAN: No questions, sir. Thank
8 you.

9 MR. JEERAKATHIL: Thank you.

10 THE CHAIRMAN: We'll take 10 minutes before
11 we turn to ACFN's argument.

12 Mr. Murphy, are you and Ms. Biem prepared to
13 deliver all of ACFN's argument today?

14 MR. MURPHY: We can do our best. I should
15 say with one caveat, we had hoped to provide to our
16 transcriber a written copy of our argument, and
17 frankly to all the parties. We've had some
18 formatting issues so that's not quite done. I can
19 certainly do my portion of the argument and we'll
20 see where we get. And then perhaps Ms. Biem can
21 carry on or perhaps she can carry on in the
22 morning.

23 THE CHAIRMAN: In terms of the material that
24 you're having trouble formatting, is that something
25 that could be provided a little later?

1 MR. MURPHY: Yes, I think it could.

2 Certainly by this evening, we could provide that to
3 Madam Court Reporter.

4 THE CHAIRMAN: Thanks. I have 4:37. We'll
5 take 10 minutes.

6

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(Brief break)

8

9 THE CHAIRMAN: Mr. Murphy, thanks for your
10 patience. I understand what we're going to try to
11 do is have you deliver your portion of ACFN's
12 argument, and then we'll turn to Ms. Gorrie and
13 she'll do a portion of hers. I hope that's all
14 satisfactory. I think it will help us out.

15 MR. MURPHY: Perhaps. I think we're going
16 to see where I get to, and I'm certainly going to
17 finish my end of the submissions, and then it may
18 be that Ms. Biem does carry on from there.

19 THE CHAIRMAN: Are you going to go for about
20 an hour. We should have a short break. Go ahead.

21

22 **FINAL ARGUMENT OF THE ATHABASCAN CHIPEWYAN FIRST NATION,**
23 **BY MR. MURPHY:**

24 MR. MURPHY: ACFN's position in this
25 hearing is that they oppose the approval of the

1 Project.

2 They say that there's direct and adverse
3 impacts on their Aboriginal and Treaty Rights and
4 traditional land use.

5 They say that consultation has been
6 inadequate.

7 They say that the mitigations proposed
8 haven't responded to the impacts that they've
9 raised and their concerns about the Project.

10 And they also say that the EIA has
11 significant gaps.

12 And so we'll be speaking to each of those
13 areas.

14 On October 30th, Shell presented its
15 directive evidence and Mr. Kovach said there will
16 be no likely significant adverse effects to
17 ecological resources. And Ms. Jefferson said there
18 will be no significant adverse effects to
19 traditional activities within the RSA or within
20 larger traditional use areas. And my learned
21 friend for Shell has reiterated those positions
22 through his submissions.

23 In my submission, we will show why those
24 statements are irreconcilable with the facts before
25 you. And as my friend said earlier, your decisions

1 here must be based on fact and analysis, and so I'm
2 going to take you to that.

3 I was going to walk through some of the Terms
4 of Reference. I'm not going to do that. My friend
5 Mr. Jeerakathil already has taken you to those
6 provisions. It takes me to about paragraph 9 of
7 the argument that I said we'd be circulating. I do
8 want to, however, highlight a couple of portions of
9 the Terms of Reference and it's only by way of
10 introduction to some of the evidence that ACFN has
11 provided.

12 ACFN has taken the Terms of Reference quite
13 seriously in developing the evidence that they've
14 prepared for this hearing. And the reason I say
15 that is, you know, you'll find in the Terms of
16 Reference, under Part 3, things like this Panel
17 considering any effects on, and it goes through
18 hunting, fishing, trapping, but it also talks about
19 related effects on lifestyle, culture, health,
20 quality of life. It talks about any adverse
21 effects of the Project on the ability of future
22 generations to pursue traditional activities or
23 lifestyle. And it also talks about any effects of
24 the Project on heritage.

25 And I point those out specifically because of

1 course we submitted a number of studies to this
2 Panel by, you know, authors such as Dr. McCormack,
3 Patt Larcombe, Alistair MacDonald. And I just want
4 to make the point that they are not just for
5 interest's sake, they are actually prepared to
6 inform those specific areas that the Terms of
7 Reference say will be considered by this Panel.

8 So they are fairly core reports. They speak
9 to a lot of evidence about those matters that I
10 just referred to in the Terms of Reference.

11 And I should add that those reports weren't
12 challenged in any way by any party. They stand as
13 uncontroverted evidence. I just wanted to make
14 that point at the outset.

15

16 **A. DESCRIPTION OF ACFN and ACFN's RIGHTS and INTERESTS**

17 Now, you heard from Elder Rene Bruno who
18 said:

19

20 "Anything on your land,
21 you'll never be restricted from
22 carrying on with your traditional
23 vocations. And that's what we were
24 told." Elder Rene Bruno, Nov 7 Transcript,

25

page 1996, lines 13 to 15

1

2

And he was referring to what ACFN was told by the Commissioners.

3

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The Supreme Court of Canada, by way of context, has looked at Treaty 8. And this is in the **R. v. Badger** case, 1996 case of the Supreme Court of Canada. And in looking at the importance to the Indians of the right to hunt, fish and trap, the Commissioners wrote:

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"We pointed out ... that the same means of earning a livelihood would continue after the treaty as existed before it, and that the Indians would be expected to make use of them ... Our chief difficulty was the apprehension that the hunting and fishing privileges were to be curtailed."

"... we had to solemnly assure them that only such laws as to hunting and fishing as were in the interest of the Indians and were found necessary in order to protect the

1 fish and fur-bearing animals would
2 be made, and that they would be as
3 free to hunt and fish after the
4 treaty as they would be if they
5 never entered into it." **Supreme Court**
6 **of Canada, R. v. Badger, [1996] 1 S.C.R. 771,**
7 **para. 39**

8
9 And, finally, by way of context, the Indian
10 Claims Commission also looked at Treaty 8 and what
11 it promised. And they said, and this is at page 77
12 of that report, which is in evidence:

13
14 "In our view, no reasonable
15 interpretation of Treaty 8 could
16 allow either the Government of
17 Canada or a provincial government
18 to destroy the ability of a First
19 Nation to exercise its treaty
20 harvesting rights or to alter
21 fundamentally the environment upon
22 which those activities were based."
23 Indian Claims Commission, March 1998, Athabasca
24 Chipewyan First Nation Inquiry: WAC Bennett Dam and
25 Damage to Indian Reserve 201 at p. 77

1

2 **i. ACFN and Treaty 8**

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So the Treaty itself, you heard Rene Bruno talking about his grandfather signing the Treaty, ACFN are clearly the successor to the Aboriginal group that signed on to the Treaty. ^{Elder Rene Bruno,}
Nov 7 Transcript, page 1996, lines 13 to 15

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ACFN and its members continue to hold and exercise those rights guaranteed by the Treaty. They include the rights to hunt, to trap, to fish, to gather. Those rights have been affirmed by several Supreme Court of Canada cases. ^{See R. v. Sundown,}
[1999] 1 S.C.R. 393 at paras. 1, 8; and R. v. Horseman, [1990] 1 S.C.R. 901,
at paras. 60-62

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And just as the right to hunt must be understood as the Treaty-makers would have understood it, so, too, must the terms "taking up" and "mining" as those appeared in the Treaty. And again, the **Badger** case looked at those terms and the Supreme Court of Canada said:

22

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25

"Although it was expected that some white prospectors might stake claims in the north, this was not expected to have an impact on

1 the Indians' hunting rights." ^{Supreme}
2 Court of Canada, R. v. Badger, [1996] 1 S.C.R. 771,
3 para. 55

4
5 The B.C. Court of Appeal in the **West Moberly**
6 decision, it's a recent case, it's actually from
7 last year, it's in the B.C. area of Treaty 8, and
8 it looked at claims being made and how those relate
9 to the Treaty. And the Court at paragraph 135
10 said:

11
12 "I interject to point out
13 that 'some white prospectors [who]
14 might stake claims', to the
15 understanding of those making the
16 Treaty, would have been prospectors
17 using pack animals and working with
18 hand tools. That understanding of
19 mining bears no resemblance
20 whatever to the Exploration and
21 Bulk Sampling Projects at issue
22 here, involving as they do road
23 building, excavations, tunnelling,
24 and the use of large vehicles,
25 equipment and structures." ^{West Moberly}

1 First Nations v. British Columbia (Chief Inspector
2 of Mines), 2011 BCCA 247 (CanLII)

3

4 And it's just to put this in context, Panel,
5 we say that those findings are applicable here in
6 that the Commissioners never anticipated that the
7 Indians could be displaced from significant areas
8 of northern lands by the expansion of competing
9 land-use activities. And there's certainly some
10 expectation they'd be displaced from smaller areas,
11 but certainly not large areas and particularly as
12 we've been seeing in the last 10 years or so with
13 the expansion of the oil sands. Dr. Pat McCormack, Research
14 Report, Treaty 8 and the Fort McKay First Nation, Exhibit 009-008B at text
15 page 14, pdf page 17. Dr. Pat McCormack, Ethnohistory Slide Deck at 47
16 (Exhibit 006-022)

17 Now, with those Treaty Rights, ACFN says that
18 they also have incidental rights. These are
19 claimed incidental rights essential to the exercise
20 of those Treaty Rights I mentioned a moment ago.
21 Those are routes of access and transportation,
22 which I'll be getting into a bit more, sufficient
23 water quality and quantity, sufficient quality and
24 quantity of resources in preferred harvesting
25 areas, cultural and spiritual relationships with

1 the land, abundant berry crops and preferred
2 harvesting areas, traditional medicines in
3 preferred harvesting areas, the experience of
4 remoteness and solitude on the land. You heard
5 some of the ACFN witnesses talking about things
6 like that, like Beatrice Deranger, the right to
7 instruct the younger generations on the land, lands
8 and resources that are accessible within
9 constraints of cost and time, and of course
10 spiritual sites. Exhibit 006-031I. Dr. Candler: Athabasca Chipewyan
11 First Nation Integrated Knowledge and Use Report and Assessment for
12 Shell Canada's Proposed Jackpine Mine Expansion and Pierre River Mine,
13 pages 27 -28; Doreen Somers, Transcript November 8 at 2148 line 6 to 2149
14 line 13

15 Now, you've heard from ACFN that Treaty 8 was
16 an agreement to share the land. And they have
17 always understood that they'd be able to manage
18 their lands and pursue their traditional vocations
19 without an interference. Rene Bruno, Transcript November 7,
20 page 1995 line to page 1995 line 24 - page 1996 line 15, ACFN Elders'
21 Declaration on Rights to Land Use, dated July 8, 2010 at text page 122 of
22 Exhibit 006-013I, Victorine Mercredi (now deceased), Indian Claims
23 Commission transcript November 27, 1996 at page 137, lines 22-29,
24 Exhibit 006-013H at pdf page 141

25 And as Elder Rene Bruno put it, ACFN members

1 would never be restricted from carrying on their
2 traditional vocations. And so the Treaty, from
3 ACFN's perspective, the Treaty protects the core
4 entitlement to their meaningful exercise of their
5 Treaty Rights on their traditional lands. ^{Chief Allan}
6 Adam, Transcript Nov. 7, page 1958, line 24, to page 1959, line 12, Elder
7 Rene Bruno, Transcript Nov. 7, page 1995, line 24, to page 1996, line 15

8

9 **ii. A Discussion of the Notion of "Territory"**

10 And I just want to take a moment to just talk
11 about the notion of territory, the notion of
12 traditional lands. You've heard some argument on
13 this.

14 Now, you've heard that the traditional lands
15 radiate north, east, west and south from the
16 Peace-Athabasca Delta. They include the Lower
17 Athabasca River. They extend to lands around Fort
18 McMurray and Fort McKay. Now, ACFN Traditional
19 Lands are not, unfortunately, defined in the manner
20 that sort of fits neatly within European patterns
21 of land use and land holding.

22 Pat McCormack does a really great analysis
23 and I'm going to point out some of the highlights
24 of the analysis she does of the view of traditional
25 lands and how they don't conform to the traditional

1 boundaries. But that's in her ethnohistory and
2 it's pages 108 to 139. Of course I won't be going
3 through all of that. Chief Allan Adam: Transcript Nov. 7,
4 page 1956, lines 4-16, page 1958, lines 6-16, and page 1967, lines 2-4.
5 Chief Adam notes that he is the seventh ACFN Chief since the signing of
6 Treaty 8. Elder Rene Bruno: Transcript Nov. 7, page 1996, lines 6-16 to
7 page 1997, line 1. Exhibit 006-013K; Dr. McCormack: An Ethnohistory of the
8 Athabasca Chipewyan First Nation, pages 39-63, 108-139, 167-171;
9 Dr. McCormack, Transcript Nov. 8, page 2290, lines 2-9, page 2291, line 22
10 to page 2292, line 4. Exhibit 006-013L: Patt Larcombe: A narrative of
11 Encroachment Experienced by Athabasca Chipewyan First Nation, pages 2-3 to
12 pages 2-7

13 Now, ACFN has been asked to identify
14 boundaries where their legitimate interests in the
15 land stop and start. And so it's important to note
16 that these are constructions that are not part of
17 traditional Dene land management practices. McCormack
18 at 108, 110, 115, Exhibit 006-013K. Marvin L'Hommecourt, Transcript
19 November 8 at p 2031, line 4 to p 2032 line 5

20 Now, ACFN has used tools such as maps and
21 planning units or zones in an attempt to explain
22 use and occupation of traditional lands. And this
23 is just to help, you know, those that are making
24 decisions, those that, in the government, that are
25 making decisions about those lands. But they've

1 been clear, and, for example, one of the documents
2 that they've written called "Footprints on the
3 Land," they clearly said in that document, look, in
4 the context of the large nomadic territory, likely
5 occupied by the Chipewyan people in the context of
6 the continually evolving culture and adaptations of
7 these Aboriginal people, it is inappropriate to
8 speak of boundaries. Exhibit 006-013J: Footprints on the Land.

9 Exhibit 006-013K: Dr. Pat McCormack, at page 123

10 And so what ACFN has tried to do in some of
11 these planning processes is it's presented its
12 lands in the form of, like, planning units, for
13 example. And it's done that in submissions on the
14 Lower Athabasca Regional Plan. Exhibit 006-013FF at PDF
15 page 259, Section 4 - ACFN Cultural Protection Areas, text pages 9-10

16 You've also seen that in the Caribou Strategy, the
17 Nih boghodi document that's been entered in
18 evidence.

19 But ACFN's been clear that those planning
20 units and zones are just that, they are units and
21 zones based on traditional use and other factors.
22 They are subsets of traditional lands. Exhibit 006-024,
23 page 10

24 Lisa King, the Director of the IRC, talked
25 about, you know, how her office works with ACFN

1 members and is constantly trying to update their
2 knowledge and their database about their territory.
3 Lisa King, Transcript November 8 at page 2089, line 12, to page 2090, line 6

4 And so just to be clear, ACFN's use of maps
5 for communication purposes with government
6 represents, you know, good-faith attempts on their
7 part to reconcile their view of territory with that
8 which is sort of expected of them. And it's not
9 meant to provide this, you know, I think has been
10 argued this notion that there's this massive area
11 which is at all times open and used by them.

12 Exhibit 006-013K: Dr. McCormack, page 125 Rather, I mean, that
13 reduces their relationship to lines on a map. It's
14 overly simplistic. It ignores the cultural reality
15 that different parts of traditional lands are
16 relied upon for different resources at different
17 times and by different ACFN families.

18 And what's relevant for this Panel's
19 decisions, inclusions, recommendations, is the fact
20 that the Project proposed here falls well within
21 all of the mapped and narrative expressions of
22 ACFN's traditional lands. And each of the mine
23 Expansion itself and the proposed compensation lake
24 are located adjacent to and on key travel routes
25 and areas that are central to Chipewyan use and

1 occupation. Exhibit 006-013K: Dr. McCormack, pages 112-115, 122, and
2 127-128

3 And if the Panel does require a static area
4 in order to understand ACFN traditional lands, our
5 submission is that the appropriate context area is
6 that which is set out as the Regional Study Area in
7 Dr. Candler's evidence, and that's found at Exhibit
8 006-013-I. It's page 38.

9

10 **iii. ACFN - Distinctive Identity and Culture**

11 I'm going to talk now about ACFN's
12 distinctive identity and culture and what the
13 evidence has shown in this hearing.

14 ACFN members have maintained their
15 distinctive identity and culture as an Aboriginal
16 people by maintaining their cultural, their social,
17 their spiritual connections to their lands. This
18 has been done throughout generations. And despite
19 the challenges that they've faced, ACFN members are
20 deliberate in their pursuit of maintaining their
21 distinctive culture and identity. And living off
22 the land remains very important to ACFN culture.
23 You heard Chief Adam say so. You've heard Marvin
24 L'Homme-court say so. And Pat McCormack, again,
25 there she is, in her ethnohistory, goes through

1 that distinctive culture and identity and how it's
2 tied to the land. Exhibit 006-013K, Dr. Pat McCormack: An
3 Ethnohistory of the Athabasca Chipewyan First Nation, pages 168-171.
4 Chief Allan Adam, Transcript November 7, page 1955, lines 7-25.
5 Marvin L'Hommecourt, Transcript November 8, page 2029, lines 9-16, and
6 page 2033, line 25, to page 2034, line 10

7 You've also heard that ACFN members reside
8 primarily in Fort Chipewyan, Fort McKay and Fort
9 McMurray. Those are the three centres in which
10 they primarily reside. Alistair MacDonald, Transcript Nov. 9,
11 page 2481, lines 5-8

12 You've heard from a number of ACFN members
13 who talked about the active exercise of their
14 Aboriginal and Treaty Rights within Shell's Project
15 area, the Regional Study Area that Shell's put
16 forward, the one that ACFN has put forward, as well
17 as the Local Study Areas for the Project.

18 You've heard that the traditional harvesting
19 conducted in these areas includes, and it's not
20 limited to, moose, deer, beaver, muskrat, marten,
21 fisher, mink, wolf, grouse, rabbit, geese, ducks,
22 there's fish, there's jackfish, goldeye, suckers,
23 berries including blueberries and huckleberries,
24 and medicinal plants. Marvin L'Hommecourt, Transcript Nov. 8,
25 page 2248, lines 12-25; Raymond Cardinal, Transcript Nov. 8, page, 2024,

1 lines 13-23; Leslie Laviolette, Transcript Nov. 8, page 2055, lines 5-13;
2 Beatrice Deranger, Transcript Nov. 8, page 2060, line 23, to page 2061,
3 line 5; Lisa King, Transcript Nov. 8, page 2088, lines 20-22;
4 Exhibit 006-013I: Dr. Candler, Integrated Knowledge and Use Report, pages 48
5 to 661; ACFN Undertaking No. 32, Transcript Nov. 9, page 2587, lines 10-19

6 I want to pause here for a moment and address
7 a fundamental flaw in the reasoning that was raised
8 by my learned friend earlier this morning. It's
9 about the notion that ACFN is not affected, there
10 may be some individuals affected but not ACFN.

11 There's extensive law on this, but what you
12 need to keep in mind is that the collective holds
13 those rights, the individual's exercise them. And
14 so you can't understand how those rights are
15 exercised unless you go to the individual users.
16 And so it's the collective holds the rights, the
17 individuals exercise them.

18 And so that's what the law says and that's
19 what's going on here. You've got ACFN rights,
20 which I've talked about them, the Treaty Rights and
21 the incidental rights, you have individual members
22 exercising those rights. And, you know, of course
23 if ACFN was not, members weren't exercising those
24 rights, of course the argument would be, well, you
25 have no use of the area, so they are between a rock

1 and a hard place. As soon as they step up and say,
2 well, in fact, we do have individuals out there,
3 they face the argument that you heard this morning,
4 which is, well, that's not affecting ACFN as a
5 whole.

6 You will never, you will never see every
7 single member of any First Nation or Aboriginal
8 group in this country going out on the same area of
9 land either together or one after the other. You
10 just won't see that. It just doesn't happen. And
11 that's not the way rights are exercised.

12 As you've heard in the hearing, the Athabasca
13 River, it's the lifeblood of ACFN traditional
14 lands. The river provides a vital transportation
15 corridor, it provides access to reserve lands, it
16 provides access to traditional hunting areas,
17 trapping, fishing, gathering areas. It also
18 supports traditional resources required for the
19 meaningful exercise of ACFN rights and the
20 continuity of their distinctive culture. Elder Rene

21 Bruno, Transcript Nov. 7, page 1998, lines 5 to 10; Marvin L'Hommecourt,
22 Transcript Nov. 8, page 2027, line 18, to page 2028, line 9; Jonathan Bruno,
23 Transcript Nov. 8, page 2069, lines 5 to 15; Exhibit 006-013I: Dr. Candler,
24 As Long As The Rivers Flow: Athabasca River Knowledge, Use and Change, PDF
25 pages 196-197; Exhibit 006-013I: Dr. Candler, Integrated Knowledge and Use

1 Report, pages 56-58

2 You heard a number of ACFN members speak to
3 this and how core the river is to getting around,
4 to getting to their sites.

5 There's also some, in my submission, very
6 helpful studies of ACFN use of the Athabasca River
7 and the tributaries and that's Dr. Candler's report
8 "As Long as the Rivers Flow." And he also did
9 another report for this hearing called the
10 "Integrated Knowledge and End Use Report." And
11 those have been filed in evidence.

12 Of course ACFN members have observed a rapid
13 expansion in oil sands development in the last 10
14 years. And as Lisa King put it in her testimony,
15 they are frustrated. They don't see that there's
16 actually any real protection for the Athabasca
17 River or for the Peace/Athabasca Delta, frankly.
18 And they are frustrated because, you know, they've
19 been watching prior recommendations of prior panels
20 in these hearings, you know, recommendations to
21 establish inflow needs of the Athabasca River,
22 protection of the Muskeg River basin, and they just
23 don't see that happening. And all they see is the
24 water levels continue to get lower and they have a
25 more and more difficult time accessing and using

1 their lands and exercising their rights. Lisa King,
2 Transcript Nov. 8, page 2091, line 16, to page 2092, line 8

3 The Muskeg River itself, and Kearl Lake, and
4 Kearl Lake you've heard is also known as "Muskeg
5 Lake" to ACFN, the surrounding lands, the lands and
6 waters between Kearl Lake and McClelland Lake,
7 those are also important hunting, trapping,
8 gathering and fishing areas.

9 And the Muskeg River particularly holds
10 spiritual significance to ACFN. It's not just
11 about, you know, have we pulled any fish from the
12 river lately. You know, as Marvin L'Hommecourt
13 said, being there is medicinal. He talked to you
14 about, you know, waking up, hearing the river.
15 It's part of the connection to the land that I
16 think gets missed. And I want to emphasize that.
17 Elder Charlie Voyageur, Transcript Nov. 7, page 2002, lines 10-17. Marvin
18 L'Hommecourt, Transcript Nov. 8, page 2035, lines 2-12. Raymond Cardinal,
19 Transcript Nov. 8, page 2040, lines 6 to 14. Leslie Laviolette, Transcript
20 Nov. 8, page 2050, lines 11-21. Exhibit 006-013I: Dr. Candler, Integrated
21 Knowledge and Use Report, pages 56-58

22 The area to the south of McClelland Lake, the
23 muskeg area that Mr. Laviolette spoke of, supports
24 woodland caribou. Their observations are that it
25 supports woodland caribou. And of course that's a

1 listed species at risk under the **Species at Risk**
2 **Act**. What you've heard about is the muskeg
3 providing safe areas for the caribou to raise their
4 young.

5 And woodland caribou are a culturally
6 important species for the ACFN. And their survival
7 is of great concern to the ACFN. And you heard
8 Chief Adam talking about the translation of their
9 name meaning "caribou eater." But what he said now
10 is, caribou are calling out for us and they are
11 asking for our help. And you see that in
12 Nih boghodi their Caribou Stewardship Plan. They
13 really take that seriously, they really feel that
14 they have a role in protecting the caribou, it's
15 important to them, spiritually and culturally.

16 Chief Allan Adam, Transcript Nov. 8, page 2207, line 16 to page 2208,
17 line 17. Leslie Laviolette, Transcript Nov. 8, page 2058, line 12 to page
18 2059, line 20. Elder Pat Marcel, Transcript Nov. 7, page 1981, lines 9 to
19 16. Exhibit 006-024, Nih Boghodi, We are the Stewards of the Land.
20 Exhibit 006-013I: Dr. Candler, Integrated Knowledge and Use Report,
21 pages 60-62

22 The bison. You've heard about the bison.
23 Bison are also important as a food source, they are
24 important culturally. You've heard about bison
25 being hunted by the Dene as long as the Dene people

1 have been around. It's been thousands of years,
2 Elder Pat Marcel said. Exhibit 006-013I: Dr. Candler, Integrated
3 Knowledge and Use Report, pages 60-61. Elder Pat Marcel, Transcript Nov. 7,
4 page 1974, line 21 to page 1975, line 5

5 The Project of course also is in the direct
6 path of migratory birds and migratory bird habitat
7 upon which ACFN rely. The spring bird hunt, it's a
8 core component of ACFN's past and present seasonal
9 round. Ray Cardinal, Transcript November 8, page 2039, lines 21-24.
10 Exhibit 006-013I: Dr. Candler, Integrated Knowledge and Use Report, page 62.
11 Exhibit 006,-013I: Dr. Candler: Migratory Bird Traditional Use, starting at
12 PDF 170

13 The Project and surrounding area of course
14 are also a source of fish and fish habitat for ACFN
15 members. And Lisa King also talked about how the
16 area will of course, some of the streams and
17 tributaries that go off of the Athabasca River and
18 that go through this area are also fish habitat
19 that members rely upon in terms of the fish that
20 enter the Athabasca River. So in looking at fish
21 and fish habitat, you need to look beyond just the
22 Project footprint, it's not just about whether
23 members fish in that segment of a river that's
24 covered by the Project. Les Laviolette, Transcript November 8,
25 page 2057, lines 2-12. Exhibit 006-013I: Dr. Candler, Integrated Knowledge

1 and Use Report, pages 57-58

2 And of course you've heard about the
3 medicinal use, the spiritual connection to the
4 lands that the members talked about. Those are all
5 very important factors that they, ACFN have made
6 connections to in terms of this Project area.

7
8 **B. Direct and Adverse Effects**

9 So let me talk a bit about the direct and
10 adverse effects that ACFN says that they have. And
11 they say they stand to be directly and adversely
12 affected by the Project in several ways.

13
14 **i. Land & Resources**

15 And the first area I would like to cover is
16 with respect to land and resources.

17 The Project of course would remove two
18 further tracts of land, that being the mine, and
19 then the compensation lake. And you've heard the
20 members talk about the diminishing intact land base
21 that they have available to exercise their rights.
22 And in practice, the members end up avoiding an
23 even more expansive area of land, it goes beyond
24 the immediate and substantial footprint of the
25 Project. You've heard Chief Adam talked about

1 contamination concerns. And it also characterizes
2 a lack of confidence in the natural resources, it's
3 a lack of confidence in the health of the fish, a
4 lack of confidence in the health of the water.

5 Elder Charlie Voyageur talked about the
6 impact that gates have and how they just end up
7 seeming like areas that they can no longer go.

8 Heard about Marvin L'Hommeccourt talking about
9 the loss of the land base and the loss of
10 resources.

11 Raymond Cardinal talked about the effect of
12 gates. He talked about the effect of the noise, of
13 the larger land disturbance of typically an
14 avoidance of a larger area. He talked about the
15 impact of the loss of the land itself. He also
16 talked about going to an area, finding berry bushes
17 covered with dust and what he thought were
18 contaminants and his avoidance of those areas that
19 were once used.

20 You also heard Mr. Laviolette and
21 Ms. Deranger talk about gates and the effect they
22 have on their psyche and their desire to go into
23 areas.

24 You also heard Ms. Deranger talk about the
25 need for quiet space, how important it is to have a

1 quiet area and how important it is to try and
2 maintain that spiritual connection to the land.

3 And so all of those factors have to be
4 considered, in my submission, by this Panel. It's
5 not just about the immediate footprint. There is a
6 broader set of impacts. Chief Allan Adam, Transcript November 7
7 at page 1968, lines 7-12 (contamination concerns); Elder Charlie Voyageur,
8 November 7 transcript at page 2009, line 19 to 2010, line 1 (gates); Marvin
9 L'Hommecourt, Transcript November 8 at page 2036, lines 2-8 (loss of land
10 base and resources); Raymond Cardinal, Transcript November 8 at page 2038,
11 lines 7-13 and page 2039, lines 2-12 (gates); page 2040, line 15, to
12 page 2041, line 11, and page 2043, line 22, to page 2044, line (noise,
13 larger land disturbance, avoidance of larger area); page 2046, line 6 to
14 page 2047, line 3 (loss of land); page 2048, lines 1-7 (dust, contaminants);
15 Les Lavolette, Transcript November 8, page 2054, line 20 to page 2055,
16 line 1 (gates); Beatrice Deranger, Transcript November 8, page 2062, line 7
17 - 22 (need for quiet space); page 2063, line 1-17 (effect of noise, gates);
18 Dr. Candler, Exhibit 006-013I at text page 69, 71; Dr. Candler, Transcript
19 November 8 at page 2400, line 7 to 2401, line 10; Patt Larcombe,
20 Encroachment Narrative, Exhibit 006-013L at text pages 5-7, 5-8 and 5-10

21 And Marvin L'Hommecourt aptly summarized the
22 effect that the oil sands operations have on the
23 land from ACFN's view and, in particular, what the
24 Project would do to the Muskeg River watershed, and
25 the impacts, the associated impacts on reliance on

1 the lands and wild resources. And he said:

2

3 "Now talking a little bit
4 about the muskeg..."

5

6 And this was on November 8th, starting at
7 page 2031:

8

9 "... now talking a little bit
10 about the muskeg. Everyone says
11 it's a mosquito infested bog, but I
12 think it's a living breathing
13 entity that houses numerous species
14 of animals and there's a whole
15 ecosystem that -- and the life
16 blood of that is the Muskeg River.

17 You know, I can give you an
18 analogy of if one were to poke
19 one's arm with a knife or
20 something, you'd say you'd have
21 adverse effect in the surrounding
22 tissues and ultimately the whole
23 body. So if you're to punch holes
24 in this living, breathing entity
25 here, certainly -- and ultimately

1 it will kill the Muskeg. And if
2 you were to move, manipulate the
3 Muskeg River, which is a big thing,
4 you're going to do to grab it and
5 move it somewhere else, and that
6 will certainly kill the surrounding
7 body of muskeg that sustains, you
8 know, moose and caribou, which of
9 course sustains us. And then, you
10 know, the smaller animals, which
11 depend on the muskeg, or the moose
12 to eat, willows, caribou have the
13 lichen or moss. And the lynx have
14 the rabbit and the rabbit eats the
15 willows, and, of course, you know,
16 and the birds feed on those pesky
17 mosquitoes in that muskeg, and of
18 course if we were to do all that
19 and manipulate all the surrounding
20 area, certainly have adverse effect
21 on that whole area and body."

22 Transcript November 8 page 2031, line 4, to
23 page 2032, line 5

24 So it's to say that it's not just about
25 redirecting a part of the river, it's much more

1 than that to the users of the land.

2 And in terms of the specific use, there's
3 been a lot documented, you heard from some of the
4 witnesses, but within the Local Study Area that was
5 set by ACFN, and that was an area of the
6 disturbance plus a five-kilometre radius, and they
7 chose that five-kilometre radius because it's the
8 distance a land user is likely to walk in a day
9 where they're out on the lands. And this is in
10 Dr. Candler's report at Exhibit 006-003I (sic),
11 [006-013I], there's 65 site-specific subsistence
12 values and that includes things like harvesting,
13 food plants, it includes high-value moose habitat.
14 There are 25 site-specific habitation values like
15 camps. Three cultural and spiritual value areas
16 like a burial area or a medicine collection area.
17 And then there's six transportation values like the
18 Muskeg River. Exhibit 006-03I: Dr. Candler, Integrated Knowledge and
19 Use Report at text pages 67-69

20 You've heard about the members who say, when
21 we've got a specific connection to the land and
22 it's gone, we're unable to pass place-specific
23 traditional knowledge on to future generations.
24 And so when we're talking about the impacts on
25 future generations, we're talking about the ability

1 of members to pass on that knowledge. And once a
2 landscape is changed like this, dug up, that
3 place-specific traditional knowledge gets lost.
4 You heard Elder Charlie Voyageur talk about that.

5 There's no evidence that Shell's Reclamation
6 Plan can reasonably be expected to recreate the
7 cultural or ecological landscapes that are
8 consistent with Aboriginal traditions of knowledge
9 and use. So it's not just about putting some trees
10 back there and hoping the animals come back. It's
11 a much broader effect. Elder Charlie Voyageur, Transcript Nov. 7,
12 page 2004, lines 14-19, page 2006, lines 12-17, page 2009, lines 5-15;
13 Raymond Cardinal, Transcript Nov. 8, page 2046, line 6 to page 2047, line 3;
14 Exhibit 006-013I: Dr. Candler, at text pages 75-78

15 The compensation lake proposed on the west
16 side of the river would also have a direct and
17 adverse impact on ACFN. You've heard how they are
18 concerned how it's going to affect the important
19 bison habitat, impact hunting areas and impact
20 berry and medicinal gathering areas. Pat Marcel
21 said, look, it's going to destroy their summer
22 habitat. Ray Cardinal said, look, I think it's
23 going to push the bison out of that area. Elder Pat
24 Marcel, November 7 at page 1978 line 23 to page 1980, line 6; Marvin
25 L'Hommecourt November 8 at page 2042 lines 14-25; Ray Cardinal, November 8

1 at page 2041 line 24 to page 2042 line 10; Dr. Candler, Transcript,
2 November 8 at 2380, line 2 to 21; 2381 at 20 - 2382 at line 2; 2391 at
3 lines 9-16; 2394 at lines 4-22; Exhibit 006-03I: Dr. Candler, Integrated
4 Knowledge and Use Report at page 72

5 Getting back to the area around the Muskeg
6 River. The one other factor that wasn't mentioned
7 is how valuable the muskeg is to the high water
8 quality. And this is of course an increasing
9 concern of ACFN is the water quality in the region.
10 Marvin L'Hommecourt, November 8 page 2031, line 4 to page 2032, line 5;
11 Shell October 15 Response, Exhibit 001-0070 at text page 9

12 The Project is also going to remove a known
13 and regionally valuable wildlife movement corridor
14 along the Muskeg River. And the corridor is going
15 to be ineffectual, in our submission, because it's
16 going to be truncated at the northeast end by the
17 mine expansion pit. And the concern of ACFN is
18 that Shell hasn't provided evidence that the
19 genetic connectivity will be ensured. And
20 Mr. L'Hommecourt put it well when he said, look,
21 migratory animals such as moose and caribou just
22 don't have the luxury of a mine escort to get to
23 their habitat. I mean, in a way, it's humorous,
24 but frankly, it describes what's going to happen
25 with the habitat corridor here. MSES, Review of Muskeg River

1 Diversion Alternative, Exhibit 006-013AA, starting at pdf page 27, text
2 pages 4 and 5; Marvin L'Hommecourt, Transcript November 8 at page 2031,
3 line 2

4 You've heard about migratory waterfowl, how
5 they are a key cultural resource and how it's
6 becoming increasingly difficult to find adequate
7 numbers of birds for harvesting. Chief Adam, Transcript,
8 November 7 at page 1957, lines 9-12; November 8 at page 2255, line 25, to
9 2258, line 8; Jonathan Bruno, Transcript November 8 at 2066, line 24, to
10 2069, line 4; Dr. Candler: Migratory Birds and Aquatic Fur,
11 Exhibit 006-013I, starting at pdf page 166, at text pages 4-5; McCormack,
12 Ethnohistory, Exhibit 006-013K at text page 32

13 You have also heard about, in addition to the
14 Project removing wetlands, it's also increasing the
15 area occupied by tailings ponds and by industrial
16 waterbodies. It increases the hazard for waterfowl
17 and other migratory birds.

18 Environment Canada said, look, you know, in
19 seriously adverse weather conditions, we don't
20 think that the bird deterrents work.

21 And ACFN is concerned that in respect of
22 birds landing on these tailings ponds that
23 operators have just not effectively managed
24 bird-oiling events and the concern that there is
25 still an inadequate capability to manage the risks

1 here. Shell at EIA Update 2008, Appendix 2, Table 14. Exhibit 001-002A;
2 MSES, Avian Hazard Map, Exhibit 006-013AA at ii, pdf 3. - see report in its
3 entirety

4

5 **ii. Water & Aquatic Resources**

6 Other impacts, you've heard about the area's
7 hydrology and groundwater flows. The flows in the
8 Athabasca River, how they are too low to support
9 the exercise of ACFN's Treaty and Aboriginal Rights
10 and the access, access, this is key, you can't
11 practice your rights if you don't have access. If
12 you can't get into an area, you can't practice the
13 rights.

14 And ACFN have done their own community-based
15 monitoring program and they found that at six of
16 the eight sample sites in 2011, water quality
17 levels were recorded as below the established
18 Aboriginal Base Flow of four feet. And that Base
19 Flow number comes from -- it's an average depth
20 which is a boat loaded with a moose, and that's the
21 depth you need in order to get in and out of an
22 area. You heard Jonathan Bruno talking about not
23 being able to get into Richardson Lake anymore.
24 It's nearly impossible. And it's an excellent
25 moose-hunting area. They can't get their boats in.

1 They can't get the moose loaded in. So that's
2 where the Aboriginal Base Flow comes from. Elder Rene
3 Bruno, November 7, page 1998, line 4, to page 2000, line 8 (on inability to
4 access the land and waters to practice Treaty rights); Elder Pat Marcel,
5 November 7, page 1987, line 7, to page 1988, line 15 (on the effects on
6 fisheries); Jonathan Bruno, November 8, page 2070, line 13, to page 2072,
7 line 13 (on the impact on exercising rights); Marvin L'Hommeccourt,
8 November 8, page 2033, lines 9-24; Dr. Martin Carver, Water Quantity
9 Considerations, Exhibit 006-013QQ starting at page 435, see section 2.2 and
10 2.4; Dr. Martin Carver, MDRA Review, Exhibit 006-013BB at sections 2.2 and
11 2.3 (re: will affect hydrology and groundwater flows); Dr. Martin Carver,
12 NNLP review, Exhibit 006-013BB starting at pdf page 24, see section 2 (re
13 will affect hydrology); Dr. Martin Carver, Transcript November 8, at
14 page 2338 at lines 4 to 14; and, more generally, Dr. Martin Carver,
15 Transcript November 8 at pages 2334-2342 re: withdrawals permitted at very
16 low flow already, lowest flows are in fall - an important traditional
17 harvesting time, and allowable withdrawals based on historic rather than
18 current hydrograph; Bruce MacClean, Community Based Monitoring Program Final
19 Report 2011 Water Quantity Monitoring, Exhibit 006-013BB, beginning at pdf
20 page 199; see text page 3, 4; and responses to Secretariat questions dated
21 November 19, 2012, Exhibit 006-031

22 Dr. Carver's work has demonstrated that we've
23 had 20 or 30 percent less flow during the fall over
24 the last seven years than we've had in the historic
25 hydrograph, upon which the Phase I rules are based.

1 Fish have been a subsistence mainstay of
2 ACFN, both before and after the Treaty.
3 Residential locations and therefore reserves, the
4 Indian Reserves for local bands were typically in
5 areas where fish could be caught. And so when we
6 talk about getting access to the reserves, those
7 reserves are set up and historical records shows
8 this, the reserves are set in areas where there are
9 good fishing locations. And Reserve IR 201D, it
10 was intended specifically for fishing for ACFN
11 members.

12 And fish continue to be important today. As
13 Chief Adam noted, members can constantly fish for
14 pickerel, pike, and in the summer months they fish
15 for whitefish. McCormack, Ethnohistory, Exhibit 006-013K at text
16 pages 29-30; Chief Adam and Lisa King, Transcript November 8, page 2257,
17 line 10, to 2258, line 20

18 If approved, the Jackpine Mine Expansion
19 would destroy a large amount of fish habitat in the
20 Muskeg River watershed. Shell estimates the
21 physical habitat loss at closure in the Jackpine
22 Mine Expansion area alone to be 795,000
23 approximately metres squared, if one doesn't
24 include the loss of Kahago Lake. But with the
25 Kahago Lake, it's 1.65 million square metres.

1 And you've heard from DFO that Shell hasn't
2 applied, and certainly doesn't seem to consider,
3 habitat loss due to chemical deposition in its
4 compensation habitat that's planned for habitat
5 loss. Exhibit 001-001C, EIA Vol 4A at table 6.7-11, text page 6-600;
6 Brian Makowecki, Transcript November 15, at 3398 lines 6-13

7 So Shell proposes to replace the loss of fish
8 and fish habitat with a compensation lake. In our
9 submission, the efficacy of compensation lakes in
10 terms of productive fish habitat, they are
11 unproven. It's not disputed that the proposed
12 Redclay south compensation lake would not produce
13 harvestable fish for a number of years. In large
14 part, due to methyl-- mercury contamination, pardon
15 me.

16 So even if fish were eventually safe to
17 harvest, the farming of the fish resource shouldn't
18 be confused with sufficient resources to support
19 the Treaty right to fish. There's no evidence
20 before this Panel that Dene people would find
21 fishing in such a compensation lake a suitable
22 alternative or substitute. It simply wouldn't have
23 any cultural meaning. It would be an imposed
24 feature on the geography, on ACFN's geography. Shell
25 NNLP Exhibit 001-064B at section 2.1.2 and Figure 5; Bill Kovach, Transcript

1 November 2, page 1155, at lines 7, to page 1161, line 22; Brian Makowecki,
2 Transcript November 15, at 3646, lines 17-19 (too early to claim success re:
3 NNLP); Lisa King, Transcript November 8 at 2266, lines 4-17

4 Many ACFN members already avoid harvesting
5 fish from the Athabasca River. The research by
6 Dr. Jones, what it demonstrates, and let's be clear
7 about this, the hypothesis is that contaminants are
8 higher in the fish near oil sands operations.
9 That's the hypothesis. That's what's been
10 demonstrated by the study. And so the study that
11 Dr. Jones presented is that the fish in the
12 vicinity have higher concentrations of larger
13 five-ring PAH in their bile than anywhere else in
14 the river system. Dr. Craig Candler, As Long as the Rivers Flow,
15 Exhibit 006-013I starting at pdf 185, see in particular text pages 19
16 (Map 4), 25-27; Dr. Candler, Exhibit 006-013I at text page 69, 71;
17 Dr. Candler, Transcript November 8 at page 2400, line 7, to 2401, line 10;
18 Chief Adam (re fear of tailings pond seepage) Transcript November 7 at
19 page 1957, line 23, to page 1958, line 5; Patt Larcombe, Encroachment
20 Narrative, Exhibit 006-013L at text pages 5-16 to 5-21; Dr. Paul Jones,
21 Preliminary Analysis of Health and Contaminant Status of Fish Collected from
22 the Slave and Athabasca Rivers, 2011-2012, Exhibit 006-013BB beginning at
23 pdf page 130

24 And so it's expected that if the Project is
25 approved as proposed, ACFN members will just

1 increasingly avoid fish downstream of the Project.

2

3 **iii. Socio-Economic and Cultural Effects**

4 There are also direct and adverse cultural
5 and psychological impacts that arise and would
6 arise if the Project were approved. Chief Adam
7 talked a bit about ACFN culture being grounded in
8 respect for Mother Earth. He said: "When land is
9 taken up, we feel the hardships, we feel the pain
10 that comes with it." Chief Adam, Transcript, November 7 at 1954,
11 lines 7-24; 1956, line 24, to page 1957, line 3; page 1958, lines 13-23;
12 page 1961, lines 12-20, page 1962 at lines 16-21, page 1966, lines 18-25

13 He talked about being the seventh generation
14 since the Treaty was signed. He talked about
15 feeling this great responsibility to ensure that
16 planning is effective for the next seven
17 generations. To make sure that development that
18 happens happens at a sustainable and controlled
19 pace. He talked about the effect of land being
20 taken up, the effect it has on ACFN members'
21 morale, on their spirit. People don't just think
22 about the land. They visit it. They do things on
23 it. They relate to the reciprocity between
24 themselves and what they see is the spirits that
25 inhabit the land and promote meaningful orientation

1 to the landscape. And so these aren't just beliefs
2 of the past. They are ongoing parts of Dene
3 awareness, of spirituality.

4 As Beatrice Deranger said: The land is "like
5 a church to some people." Dr. McCormack, Ethnohistory at 115;
6 Exhibit 006-013K, at text pages 114-115; Beatrice Deranger, Transcript
7 November 8, page 2061, line 17, to page 2062, line 6; pg 2062, line 6, and
8 page 2064, lines 17-20

9 That's the kind of effect it has when Dene
10 people go out there. You heard Lisa King testify
11 that:

12
13 "The people feel the spirit
14 of the land. When the land is
15 disturbed they feel it. I took my
16 granny north..."

17
18 "... she closed her eyes and
19 she just blocked her head..."

20
21 "I just want to say it
22 affects, when you see the impacts
23 on land, it affects people in
24 different ways."

25

1 And:

2

3 "Depending on your spirit and
4 your strength, you can deal with
5 the impacts of development
6 differently."

7

8 "I just want to say it's our
9 duty as indigenous people on this
10 land to care for our Earth Mother."

11 Transcript November 8 at page 2103, line 10 to 2104,

12 line 8

13

14 And so ACFN has submitted studies to this
15 Panel.

16 Alistair MacDonald in his study, he talks
17 about the loss of ability of ACFN members to
18 meaningfully exercise their Treaty Rights and the
19 results this has causing adverse sociocultural
20 impacts including decreased ability to transmit
21 knowledge, the adverse impacts to community
22 well-being. Alistair McDonald, Supplemental Social, Economic and

23 Cultural Effects Submission, Exhibit 006-013M at Chapters 6 and 7

24 Patt Larcombe talks about in her encroachment
25 narrative, she talks about, you know, a decrease in

1 the population in a traditional resource species,
2 the need to travel further afield to harvest
3 species, or the increased competition can lead to
4 decreased harvesting opportunities.

5 And in the context of social-economic
6 effects, traditional food has been referred to as
7 the "anchor for cultural and personal wellbeing."
8 And consuming wild foods is fundamentally important
9 for personal and cultural wellbeing of Aboriginal
10 individuals and communities. Patt Larcombe, A Narrative of
11 Encroachment Experienced by ACFN, Exhibit 006-013L, generally at chapters 5
12 and 6, specifically at text pages 6-12, 6-13, 6-20 to 6-23. See also Figures
13 on pages 2-14 and 2-15; Les Laviolette, Transcript November 8 at page 2277,
14 lines 1-21

15 And when access to country foods is impacted
16 or lost, a subsequent effect is loss in personal
17 identity and deterioration in overall sense of
18 self.

19 You heard Jonathan Bruno, he's a young guy,
20 he talks about he has four children, he really
21 wants them to learn to live off the land. It's
22 extremely important to him. He really worries that
23 they are not going to be able to do, they are just
24 not going to have the ability to do so, the way the
25 lands and waters are being affected. Jonathan Bruno,

1 November 8, page 2073 lines 12 to 21

2 You heard Marvin L'Hommecourt talk about how
3 being able to survive off the land, it's key, it's
4 a key part of the culture. ^{Marvin L'Hommecourt November 8,}
5 ^{page 2033, line 25, to page 2034, line 7}

6 And so ACFN is subject to an increasing level
7 of adverse socio-economic effects and the effects
8 on their culture associated with rapid oil sands
9 development. And so this Project, this Project
10 itself, we're not talking about some other project,
11 we're talking about this Project, it is anticipated
12 and it's anticipated because of what's happened in
13 the last 10 years, it's going to have effects on
14 members passing on their culture, accessing
15 spiritual sites, a loss of tranquillity in
16 relationship with the land. ^{Alistair McDonald, Supplemental}
17 ^{Social, Economic and Cultural Effects, Submissions, Exhibit 006-013M at}
18 ^{chapters 6 and 7; Beatrice Deranger, November 7, page 2061, line 8, to}
19 ^{page 2062, line 6; Jonathan Bruno, November 7, page 2073, lines 5-19}

20 And some of the other social issues that
21 you've heard about, members that try to get
22 involved and work in the oil sands industry, you
23 know, as my friend Mr. Jeerakathil said, look,
24 there's no doubt that it brings economic benefits,
25 but you also have to consider some of the other

1 effects. And so you've got ACFN members going to
2 try and work in oil sands, like they report
3 disruptions in family and community dynamics
4 because of long shift rotations, income inequity,
5 isolation from their social support networks.

6 You heard Kim Marcel, the employee for ACFN
7 talk about some of the social issues she sees.

8 Kim Marcel, November 7, page 2082, lines 2-8; page 2085, line 11, to
9 page 2086, lines 1-15

10

11 **C. Cumulative Impacts in the Region.**

12 I'm going to talk a bit about now cumulative
13 impacts.

14 One of the challenges that ACFN sees with the
15 way these projects are approved is that cumulative
16 impacts are clearly occurring but they don't seem
17 to be adequately addressed in the context of the
18 Projects. And I believe one of you Panel Members,
19 I think it was you, Mr. Bolton, talked about how
20 everybody sees the cumulative impacts happening but
21 nobody says their project has any connection to
22 those cumulative impacts. And ACFN of course would
23 disagree with that, Shell's assessment in that
24 respect. What they would say is this Project would
25 substantially contribute to the cumulative impacts

1 of development in the region and it would do so in
2 a way that threatens the sustainability of ACFN's
3 culture, their way of life, exercise of their
4 rights.

5 Going back to what I mentioned at the
6 beginning, Treaty 8 promised the continued patterns
7 of use and occupation forever. The words are in
8 perpetuity. And they've already experienced
9 significant degradation of their ability to
10 exercise their rights and their traditional ways of
11 life.

12 And you're looking at the, in the Terms of
13 Reference, going back to a pre-industrial baseline
14 in terms of considering over the last 40 years in
15 terms of considering the cumulative impacts.

16 And so, again, the studies that we've put
17 forward in our submission assist you in
18 understanding that.

19 So it puts in context what members say when
20 they say, look, we can't just go somewhere else,
21 there are problems with just going somewhere else.

22 You know, the cultural importance of the
23 lands between the Peace-Athabasca Delta and Fort
24 McKay, which include the Regional Study Area here,
25 the importance of those lands has increased

1 dramatically in recent years and it's as a result
2 of a number of cumulative factors, and those
3 include:

4 Loss of significant portions of lands for
5 traditional activities, you know, starting with the
6 construction of the Bennett Dam.

7 There's been loss of other portions of
8 territory due to industrial development.

9 There's been the creation of Wood Buffalo
10 National Park, which of course goes back much
11 further, but until very recently ACFN was simply
12 not allowed to go in there and they don't feel the
13 connection to the land any longer, they've lost
14 that through generations.

15 Government regulations including the
16 prohibition of hunting migratory birds and bison
17 for periods of time.

18 The imposition of the registered fur
19 management regime. Elder Charlie Voyageur, Transcript November 7 at
20 2006, line 22, to page 2007, line 13 (impediments posed by RFMA system);
21 Dr. McCormack, Ethnohistory, Exhibit 006-013K, generally, and specifically
22 at text pages 18-20, 25-27, and at section 7 (text page 139); Dr. McCormack,
23 Fort Chipewyan and the Shaping of Canadian History; Exhibit 006-013K,
24 starting at pdf page 209 at Chapters 5 - 9; Patt Larcombe, Encroachment
25 Narrative, Exhibit 006-013L, specifically at 3-6 to 3-8 and 3-12, generally

1 at Chapters 3 and 4; Doreen Somers, Transcript November 8 at page 2132,
2 lines 12-16, page 2135, lines 11-22

3 You heard about Elder Charlie Voyageur
4 talking about how the trapline regime has, you
5 know, ended up being imposed on all of northern
6 Alberta. There's been a significant relocation of
7 populations of ACFN members.

8 And so the suggestion that ACFN members who
9 use and are connected to the area that the Project
10 is going to affect, that they can just go
11 elsewhere, is a complete and utter misunderstanding
12 of the impacts to the land that ACFN has already
13 faced. Elder Charlie Voyageur, Transcript November 7 at 2007, line 14, to
14 page 2008, line 15

15 You know, and we've heard a number of times
16 in this proceeding that Shell's been consulting
17 with ACFN for 15 years or so. Surely Shell would
18 understand by now that it's not an answer to say,
19 well, sure, we're using up this area, but you can
20 just go somewhere else. Surely through that
21 consultation process they will have understood that
22 that's just simply not a reasonable suggestion.
23 And so when Shell says, look, we listened to your
24 concerns, we take them into account, my suggestion
25 is, on that issue, they just don't, they do not, if

1 that's the answer, "you can go somewhere else."

2 So in short, place matters. Specific
3 locations and the resources and traditional
4 knowledge associated with specific locations is
5 really important. It's important to those who know
6 the land, who use those areas. ^{Dr. Pat McCormack,}
7 Ethnohistory, Exhibit 006-013K at text pages 167-171; Dr. Candler, ACFN
8 Integrated Knowledge and Use Report for JPME and PRM, Exhibit 006-013I at
9 65, ACFN Advice to the Government of Alberta on LARP, Appendix F, Tab 51(g);
10 Exhibit 006-013FF, starting at page 259, text page 27 re cultural protection
11 zones; Patt Larcombe, Encroachment Narrative, Exhibit 006-013L at
12 section 6.3.2, starting text page 6-17

13 You know, prior to the construction of the
14 Bennett Dam, the Peace-Athabasca Delta was
15 resource-rich. It was a heavily relied-upon area
16 of ACFN traditional lands. There's reports of the
17 multitudes of fish, and the channels swarming with
18 muskrat, and large bison herd, and the waterfowl
19 densities were massive. ^{Historical review of Biological}
20 Resources of the Peace Athabasca Delta, Exhibit 006-006-013H starting at
21 pdf page 179; see text page 155, 156, 158, 160

22 And the Elders talk about this as well. And
23 this is in the study of Footprints on the Land. It
24 accords with the traditional knowledge of the
25 delta. ^{Elder Charlie Voyageur, Transcript November 7, page 2004,}

1 lines 3-9; Footprints on the Land, Exhibit 006-013J at Chapters 7 and 8;
2 Dr. Candler, Migratory Birds and Aquatic Fur Technical Memo;
3 Exhibit 006-013I, starting at page 166, see text pages 8-9

4 But the severe impacts on ACFN's way of life
5 after the dam was constructed was that many
6 families had to leave the bush for life in town.

7 Exhibit 006-013H pdf pages 114-146 and pdf page 323

8 And so the delta began to dry up and habitat
9 was reduced for key species, like muskrat, like
10 moose, waterfowl, and this has had long-lasting
11 negative impacts on ACFN members and other local
12 people who use the land. Dr. McCormack, Ethnohistory at text

13 pages 15-16 and 161-63; Indian Claims Commission decision,
14 Exhibit 006-013H at text page 78; Letter INAC to ACFN, Exhibit 006-013H at
15 page 147

16 And you've heard about the ongoing issues
17 with the ability to travel by water. And that's
18 been for a number of years and it's just getting
19 worse.

20 And so that's the area around Fort Chipewyan.
21 But you've also heard about the southern portion of
22 ACFN's traditional lands and how those lands are
23 being overwhelmed by industrial development and
24 it's most significantly from oil sands exploration
25 and extraction.

1 And virtually all of the lands that ACFN
2 includes within its Traditional Lands in Alberta
3 south of Wood Buffalo National Park and west of the
4 Saskatchewan border have been sold off by way of
5 oil sands leases. And so we're not talking about,
6 you know, this is a real prospect, a very real
7 prospect of exploration activity and development on
8 those tenures. We're not talking about some
9 hypothetical. Shell's witness panel talked about
10 how they are obligated to develop their tenures. I
11 think the wording by Mr. Roberts was, we're
12 obligated to our stakeholders, which include the
13 public and everybody else out there. And so this
14 isn't a hypothetical. These are leases that have
15 been given out over the lands that ACFN uses.

16 John Broadhurst, Transcript, October 30, page 215, lines 3-6; page 230,
17 lines 2-9; Mr. Roberts, Transcript October 30, page 447, lines 5-9

18 And so we'd ask that you keep that in mind.
19 I mean, this is also about cumulative impact.

20 And other pressures that have also been
21 experienced include, you know, increased
22 non-Aboriginal hunting, other recreational uses,
23 forestry, mineral development, uranium exploration,
24 conventional oil and gas development, and
25 increasing settlement and infrastructure

1 construction. Patt Larcombe, Encroachment Narrative,
2 Exhibit 006-013L, Chapter 4

3 So that paints a, you know, in our
4 submission, a picture of the cumulative impacts
5 that have been occurring for years and will
6 continue to impact if this Project is approved.

7 The only herd of bison outside of Wood
8 Buffalo Park is the Ronald Lake herd. You've heard
9 about that. ACFN members worry that it's already
10 at dangerously low levels. MSES, Effects on Traditional
11 Resources - ACFN Exhibit 006-0130 at text pages iii, 16-18; Mr. Virc,
12 Transcript November 15, page 3348, line 10, to page 3349, line 10;
13 Mr. Wiacek, Transcript November 15, page 3360, lines 4-8

14 I believe my friend talked about the numbers
15 within Wood Buffalo Park. ACFN does not refer to
16 those bison as bison they use. They refer to the
17 ones at Ronald Lake as the ones that they would
18 have access to.

19 Of course you've heard about the woodland
20 caribou, they are at dangerously low levels and
21 they are not available for traditional resource
22 use. MSES, Effects on Traditional Resources - Exhibit 006-0130 at text
23 pages 13-15

24 ACFN has led evidence to show that in this
25 proceeding that between 1992 and 2008 an average of

1 42 square kilometres, it's about 10 moose home
2 ranges, moose habitat has been removed each year
3 from ACFN's Regional Study Area and moose density
4 has declined substantially.

5 They've shown beaver habitat, experienced a
6 loss of about 6.3 square kilometres per year.

7 Waterfowl habitat, the loss of about 3.6
8 square kilometres a year. And while at the same
9 time the area of waterfowl hazard has more than
10 tripled.

11 And now the extirpation of woodland caribou
12 from the ACFN Regional Study Area is a near
13 certainty. MSES, Effects on Traditional Resources - Exhibit 006-0130

14 This comes out of the EMESIS report, effects
15 on traditional resources, and it's
16 Exhibit 006-0130. And those trajectories were
17 confirmed in a recent analysis. MSES, Continued Effects on
18 Traditional Resources - 2011, Exhibit 006-013P

19 And so all of those things, those are the
20 effects on the animals, the effects on use of the
21 lands, those are all effects that ACFN has suffered
22 and should be considered in terms of the cumulative
23 impacts that this Project will contribute to.

24 And that wraps up my segment of the argument.
25 And I wonder if we could just take a couple of

1 minutes just to assess where we're at?

2 THE CHAIRMAN: Yes, please go ahead, sir.

3 MR. MURPHY: Thank you. I wonder if we
4 could just take five minutes and I'll speak with my
5 friend, Ms. Gorrie.

6 THE CHAIRMAN: Fine. Sir, we need to take 5
7 or 10 minutes in any event, so this may be a good
8 time.

9 **(Brief Break)**

10

11 THE CHAIRMAN: Mr. Murphy, did you have
12 something?

13 MR. MURPHY: I thought I would just say
14 for the record that Ms. Gorrie has graciously
15 agreed to go next and my colleague, Ms. Biem, will
16 wrap up her submissions in the morning. She's
17 going to deal with three main subject areas: And
18 that's Shell's EIA, consultation with Shell, and
19 the mitigation, and then conclude.

20 THE CHAIRMAN: Thank you. Ms. Gorrie?

21 MS. GORRIE: Good evening, Panel. Before
22 I start, I was under the understanding that I
23 should probably go about through half my
24 submissions. Is there a timeframe in which I
25 should be closing by?

1 THE CHAIRMAN: An hour would be good. If
2 that's a convenient break point.

3 MS. GORRIE: I might be a little under an
4 hour where it actually breaks.

5 THE CHAIRMAN: That's fine.

6

7 **FINAL ARGUMENT OF THE OIL SANDS ENVIRONMENTAL COALITION,**
8 **BY MS. GORRIE:**

9 MS. GORRIE: So I'm aware that Madam Court
10 Reporter has been going hard all day, so I'm going
11 to do my best to talk slowly for her poor fingers.

12 So I'm not going to be addressing all the
13 issues in OSEC's pre-filed submissions; rather, I'm
14 going to focus on the key issues. And obviously I
15 won't be reviewing all the evidence due to time
16 constraints.

17 And as some of my colleagues have done, I've
18 provided a copy of our submissions to the court
19 reporter, and the citations will also be in there,
20 so I will make statements that are incorporated
21 into the transcripts by virtue of the fact that
22 I've already provided the citations. And I also
23 ask that my verbal comments take precedence where I
24 deviate from my speaking notes.

25 So OSEC submits that the evidence shows that

1 there are significant adverse effects from this
2 Project and there's an absence of adequate
3 assessment and demonstrated technically and
4 economically feasible measures to mitigate those
5 effects.

6 We also believe that this Project is not in
7 the public interest.

8

9 **LEGAL FRAMEWORK**

10 Now, to begin with, I'm going provide an
11 overview of the legal framework within which this
12 Panel must make its determination.

13 To start off with, the biggie, **CEAA (2012)**.

14

15 **CEAA 2012**

16 1. It includes a requirement to promote
17 sustainable development in order to achieve or
18 maintain a healthy environment and a healthy
19 economy. This includes a requirement to meet the
20 needs of the present without compromising or
21 impairing resources for use by future generations.

22 2. It also includes a requirement to ensure
23 that designated projects are considered in a
24 careful and precautionary manner to avoid
25 significant adverse effects.

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Lower Athabasca Regional Plan ¹ Exhibit 017-016T

Now, we're all very familiar with the Lower Athabasca Regional Plan, or LARP, by now. It was released this fall. And as set out in Section 15 of the **Alberta Land Stewardship Act**, regional plans are binding on the Crown and on statutory decision-makers.

Pursuant to the **Energy Resource Conservation Act**, the Board must act in accordance with any applicable regional plans. In other words, its decisions must be consistent with LARP.

Now, an overriding goal of LARP is a healthy environment and it requires that (as read):

"The environmental and social impacts associated with long-term opportunities for oil sands development are carefully managed."

And one of the outcomes specified in LARP is that landscapes are managed to maintain ecosystem function and biodiversity. This includes an objective to avoid or mitigate land disturbance impacts to biodiversity.

1 It's also important to note that LARP does
2 not designate any areas within the region for
3 intensive use.

4

5 **Sub-regional Integrated Regional Plan for the Fort**

6 **McMurray - Athabasca Oil Sands region**

7 Now, this one's a mouthful, but the
8 Subregional Integrated Regional Plan for the Fort
9 McMurray-Athabasca Oil Sands Region, and I'll just
10 refer to it as the Fort McMurray IRP. And as
11 stated in LARP, Integrated Resource Plans represent
12 the Government of Alberta's Resource Management
13 Policy for Public Lands and Resources and are
14 intended to be a guide for decision-makers. ² Exhibit
15 017-016T, p. 4

16 The Fort McMurray IRP is the guiding plan for
17 the region and includes population targets for some
18 species. It also includes the following wildlife
19 objectives:

20 - To minimize damage to
21 wildlife habitat and where possible
22 to enhance the quality, diversity,
23 distribution, and extent of
24 productive habitat.

25 - It also includes to maintain

1 and if possible to enhance the
2 diversity, abundance and
3 distribution of wildlife resources
4 for native sustenance, recreational
5 and commercial benefits.

6 - Finally, it states that one
7 of the objectives is to protect
8 wildlife species considered
9 sensitive to disturbance or
10 environmental change and to promote
11 increased populations and
12 distribution of species considered
13 rare or endangered. ^{3 Exhibit 017-016W}

14
15 **EPEA**

16 Another statutory instrument is the
17 ***Environmental Protection and Enhancement Act***. Now,
18 the ***Alberta Land Stewardship Act*** does not repeal
19 the EPEA and therefore environmental protection is
20 still a legislative requirement. It's also
21 important to note that the EPEA adopts a principle
22 of sustainable development and recognizes the
23 importance of preventing and mitigating the
24 environmental impact of development.

25

1 **SARA**

2 Finally, there's the *Species at Risk Act* or
3 **SARA**. And this Act was enacted in part to fulfill
4 Canada's international obligations under the UN
5 Convention on Biological Diversity to protect and
6 conserve biodiversity. It's depended to provide
7 for the recovery of species at risk through various
8 means, including the protection of its habitat. In
9 fact the Act states that the habitat of a species
10 at risk is key to their conservation.

11 Now, there's a government document entitled
12 "Addressing Species at Risk: Considerations Under
13 the *Canadian Environmental Assessment Act*." And
14 this document was referenced by Environment Canada
15 in their submissions and was discussed during
16 cross-examination. And it states that **SARA**
17 requires that if a project subject to an
18 environmental assessment is carried out, measures
19 must be taken to avoid or lessen all adverse
20 effects of the project and monitor them consistent
21 with applicable recovery strategies and action
22 plans.

23 It also states that, thus:

24

25 "... in developing mitigation

1 measures ... the approach should be
2 systematic and rigorous." ⁴ Exhibit
3 017-041, p. 41

4

5 Now that document also states that:

6

7 "Where there is uncertainty
8 regarding the likelihood or
9 possible significance of adverse
10 effects on wildlife species at
11 risk, it is best practice to adopt
12 a precautionary approach in the
13 analysis, given their
14 vulnerability." ⁵ Exhibit 017-041, p. 35

15

16 Finally, it states that:

17

18 "From a practical
19 perspective, the obligations
20 under... **SARA** reinforce the need
21 for federal environmental
22 assessments to pay particular
23 attention to listed wildlife
24 species and their critical
25 habitat." ⁶ Exhibit 017-041, p. 35

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2 **Public interest test**

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Now, in accordance with its provincial legislative mandate, this Panel must determine whether this Project is in the public interest of Albertans having regard to the social and economic effects and the effects on the environment.

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Now, as held in *Solex Gas Processing Corp.*, which is an Alberta Court of Appeal decision (as read):

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"The scope of the public interest is meant to be broad and should not be interpreted restrictively." ^{7 paras 33-38}

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The Board in Cheviot Mine also held that (as read):

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"... the establishment of need does not automatically imply that the project is in the public interest ... The degree of environmental, social, and economic impact must also be assessed."

8 page 21

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In that case, the Board refused to permit coal-mining activity in one portion of the project area because it determined that the loss of the value of the coal reserves would be outweighed by the loss of the valued environmental components.

To assess whether a project is in the public interest, the Panel must look at government policy documents and legislation as they are the expression of the public interest.

Now, before delving into the meat of my submissions, it is important to note that throughout the EIA and during the hearing, Shell dealt with predictions of exceedances of thresholds and guidelines by referring to monitoring data and studies regarding impacts or pollution levels from the last decade. Evidence of impacts or lack of impacts during this past time period do not justify another project or lack of effective mitigation.

The main purpose of the Environmental Assessment is to enable development to be sustainable and avoid environmental degradation.

This means the focus must be on the likely impact of the project and other projects in the

1 area that will be operating at the same time.

2 And this will be in the future.

3 Such an approach is required in order to
4 adequately assess the project's effects and
5 determine whether it is in the public's interest.

6 So with that in mind, I will now turn to
7 addressing the key issues of concern for OSEC.

8

9 **TERRESTRIAL IMPACTS**

10 The first issue, and I think the only one
11 that I will be going through this evening, is
12 terrestrial impacts.

13

14 **Thresholds**

15 So when it comes to terrestrial resources,
16 Shell is hanging its hat on LARP. However, no
17 biodiversity or land disturbance standards have yet
18 been developed under LARP.

19 In the absence of those frameworks, LARP
20 currently provides no protection for terrestrial
21 resources in the RSA. It also fails to provide
22 guidance regarding the thresholds for important
23 considerations such as habitat loss, wildlife
24 abundance and land disturbance.

25 While LARP does contain some conservation

1 areas, virtually all of those areas fall outside
2 the RSA. ⁹ Transcript Volume 8, p. 1722, l. 6-10

3 Now, Shell suggests that in the absence of
4 frameworks under LARP, there are no applicable
5 thresholds for assessing the impacts of the
6 Project. ¹⁰ October 15th Submission However, that is
7 simply not the case.

8 It was held in the Total Decision Report that
9 the threshold for significance should be 20 percent
10 habitat loss for wildlife; but when dealing with
11 species at risk, any impacts are significant.

12 ¹¹ Exhibit 017-016DD Now, such a precautionary approach
13 is necessary as species at risk are already
14 threatened by habitat loss and population declines.
15 As confirmed by Environment Canada, there risk
16 tolerance is very, very low. And one has to be
17 very conservative and precautionary when assessing
18 risk or determining impacts to them. ¹² Transcript

19 Volume 13, p. 3118, l 1-10; p. 3119, l. 6-10

20 Shell is aware of the Total decision when it
21 undertook its assessment, yet it decided to
22 disregard it. But if they had applied those
23 thresholds, they would have determined that there
24 would be significant adverse effects for 16 of the
25 assessed species. ¹³ Exhibit 017-032

1 Direction regarding thresholds is also
2 provided by CEMA's Terrestrial Ecosystem Management
3 Framework, or TEMF, which we've also heard a lot
4 about during the hearing.

5 Now, while Shell does not take issue of the
6 Application of some aspects of the TEMF, it argues
7 that the Natural Range of Variability, or the NRV
8 aspect, should not (sic) be applied on a regional
9 scale and not to specific projects -- or, sorry,
10 should only be applied on a regional scale and not
11 to specific projects. ¹⁴ Transcript Volume 5, p. 317, l. 24;
12 p. 318, l. 12

13 In short, Shell only wants to apply the TEMF
14 when it is convenient for them to do so.

15 The argument that TEMF should only be applied
16 on a regional scale was dismissed by the Panel in
17 Total Joslyn. ¹⁵ Transcript Volume 5, p. 917, l. 24; p. 918, l. 12

18 We also heard from Dr. Song with Environment Canada
19 that the TEMF is a valuable tool but that the TEMF
20 approach of setting management triggers at
21 10 percent below the NRV is not precautionary
22 enough. ¹⁶ Transcript Volume 13, p. 3117, l. 1-8 If Shell had
23 undertaken an assessment of the NRV, it likely
24 would have concluded that the RSA level, 13 of 19
25 species assessed, would be more than 10 percent

1 below the Natural Range of Variability.

2 17 Exhibit 017-032

3 The Fort McMurray IRP also provides some
4 guidance regarding thresholds. It contains a
5 population target for moose which Shell failed to
6 consider in its assessment but which it later
7 admitted during cross-exam that it would not be
8 met. 18 Transcript Volume 8, p. 1617, l. 6-15

9 While Shell takes the position that we need
10 to wait for LARP to determine thresholds, it also
11 makes several references to the concept of critical
12 thresholds in support of the notion that habitat
13 loss up to the range of 70 to 90 percent is
14 acceptable and that it should be used as a guide
15 when assessing effects. 19 Exhibit 001-051E, p. 3-23 To
16 put it simply, relying on the concept of critical
17 thresholds is the opposite of precautionary.

18 Mr. Wiacek with Environment Canada stated
19 that 70 to 90 percent thresholds is not
20 precautionary, and that thresholds can vary
21 depending on various factors, including the species
22 at issue and the study area.

23 He also stated that there is a lot of
24 uncertainty around thresholds and that habitat loss
25 in the range of 20 to 40 percent can cause a change

1 in a population trajectory. He also cautioned the
2 Panel in terms of how they apply such thresholds.

3 20 Transcript Volume 13, p. 3112, l. 1-17

4 In sum, the critical threshold approach,
5 which could take a species to the brink of
6 extinction, is clearly inconsistent with CEAA and
7 **SARA**, both of which require precaution be taken.

8 Alternatively, if Shell's argument that no
9 threshold exists is accepted, we submit that in
10 such circumstances, the Panel should act
11 particularly cautiously in assessing the effects of
12 the Project.

13 And there's an EUB *Decision 2001-33* that we
14 reference in our submission. And there, the Board
15 states:

16
17 "The existence of regulatory
18 standards is an important element
19 in deciding whether potential
20 adverse impacts are acceptable and
21 whether a proponent has
22 satisfactorily accounted for these
23 externalities ... Where no
24 sanctioned thresholds exist, it is
25 especially critical that the Board

1 weigh the impact of potential
2 adverse effects on the public and
3 the efficacy of the mitigative
4 measures designed by a proponent to
5 minimize these impacts to
6 acceptable levels." ²¹ Exhibit 017-016,
7 p. 23

8

9 **Determining Significance**

10 Shell has also erred by disregarding the
11 impacts of the Project at the LSA level in favour
12 of an RSA level approach. And my friend discussed
13 this earlier in his submissions, but I'm going to
14 discuss this as well because I think it's a very
15 important aspect of the assessments.

16 As confirmed by Shell, there is no policy or
17 legislative basis on which to take such an
18 approach. In fact, again, the Total Panel said
19 that it's unusual to use the RSA for determining
20 significance of effects and that the LSA is
21 normally used to assess effects of a Project.

22 ²² Transcript Volume 5, p. 900, l. 3-17

23 Shell attempts to pull support for an RSA
24 approach by using inappropriate analogies and by
25 citing documents that do not support that

1 proposition. 23 Transcript Volume 2, p. 265, l. 16; p. 266, l. 3;
2 Transcript Volume 5, p. 905, l. 19 to p. 906, l. 15

3 The **EPEA** and **CEAA** both indicate that there's
4 a requirement to provide a project-specific
5 assessment along with a cumulative effects
6 assessment. While the RSA is the appropriate scale
7 for a cumulative effects assessment, it is not the
8 appropriate scale for a project-specific one.

9 And Mr. Wiacek with Environment Canada summed
10 it up best when he said:

11
12 "The issue I have is in
13 determining project effects. Shell
14 has only assessed the significance
15 of Project effects at the scale of
16 the Regional Study Area. And part
17 of the justification they give is
18 they reference the Cumulative
19 Effects Assessment Guide, which
20 deals with cumulative effects and
21 not project effects. And actually,
22 when you review that document, it
23 actually talks about the potential
24 for significance of local effects
25 and their contribution to regional

1 effects.

2 So it's our opinion that the
3 significance of project effects
4 could be evaluated at both the
5 local and regional scales to
6 provide a complete understanding of
7 what the Project effects are and
8 the appropriate mitigation measures
9 for the Project." ²⁴ Transcript Volume 14,
10 p. 3608, l. 2-19

11
12 So what we have here is really an approach by
13 Shell that seems to expand the scale as far as is
14 necessary in order to make very real impacts seem
15 minor. In order to determine significance, not
16 only did Shell look at the RSA level, it expanded
17 its scope of assessment to include available trend
18 information not only within Alberta but in Canada
19 as well. ²⁵ Transcript Volume 7, p. 1380-1381

20 Such an approach is contrary to the
21 legislative requirements for conducting EAs. And
22 again, I promise I won't do much more quoting from
23 Mr. Wiacek, but he did make an interesting
24 statement:

25

1 "And I think that
2 misrepresents how significance is
3 typically conducted or determined
4 in Environmental Assessment. The
5 scope of the Environmental
6 Assessment is the Local Study Area
7 and the Regional Study Area, but
8 this has been expanded to include
9 the provincial and the national
10 scale, which I think can be very
11 misleading in determining
12 significance." 26 Transcript Volume 14,
13 p. 3605, l. 12-20

14
15 And on that basis, Mr. Wiacek then goes on to
16 state that he is not satisfied with Shell's
17 determination of significance. 27 Transcript Volume 14,
18 p. 3606, l. 8-11

19 Shell has tried to dance around the
20 information that has been provided not only by
21 scoping out to the RSA or even the provincial or
22 national level, but also by applying completely
23 subjective tests to assess significance of effects.

24 As mentioned earlier, they apply the
25 ecological context to determining significance and

1 in the case of cumulative effects they look at
2 whether they compromise resilience of a population
3 such as that they are no longer likely to be
4 self-sustaining. ^{28 Exhibit 001-036, p. 56}

5 Now, Shell provides no analysis in the
6 assessment to show how they assessed the ecological
7 context or determine that species are still
8 self-sustaining or resilient. Shell stated
9 numerous times during the cross-examination that
10 they applied their professional judgment in order
11 to determine whether the effects were significant.
12 ^{29 Transcript Volume 5, p. 896, l. 21 to p. 897, l. 23; p. 901, l. 8;}
13 ^{Transcript Volume 3, p. 380, l. 12-14}

14 But Mr. Wiacek stated that it is very
15 difficult to determine whether a species is
16 self-sustaining. ^{30 Transcript Volume 14, p. 3604, l. 16-23}
17 Despite that fact, Shell was somehow able to make
18 that determination simply by applying its
19 professional judgment with no documentation to
20 support it in the assessment. So in reality, Shell
21 undertook a subjective analysis that is not
22 delineated in the Application. Subjective
23 professional judgement of the Proponent that is
24 unsupported by evidence should not guide decision
25 making and should be disregarded by the Panel.

1 The true ecological context is an LSA and RSA
2 that has been adversely affected. ³¹ Transcript Volume 3,
3 p. 371, l. 21 to p. 373, l. 3 Shell has admitted that the
4 LSA will be completely disturbed during the life of
5 the Project but for a 500-metre buffer. ³² Transcript
6 Volume 3, p. 356, l. 5-7 In fact, from Base Case to
7 Project Case, 91 percent of wetlands in the LSA
8 will be lost or altered with the majority of these
9 being peatlands. ³³ Exhibit 001-051F, Table 4.3-1

10 There's also evidence that the RSA generally
11 is highly impacted and will be increasingly so as
12 approved development proceeds. For example, 13 of
13 19 assessed species will lose more than 20 percent
14 of their high value habitat within the RSA in the
15 Planned Development Case Cumulative Effects
16 Assessment. ³⁴ Exhibit 001-063, Table 1.3-1 And that's to
17 say nothing of moderate and low quality habitat
18 which we've seen has been considered in previous
19 assessments. Now, these impacts are also
20 conservative as they do not include reasonably
21 foreseeable disturbances such as mandatory
22 exploration disturbances on oil sands leases.
23 ³⁵ Exhibit 017-016, p. 16-17

24 Evidence referenced during this hearing,
25 including the Government of Alberta Athabasca Oil

1 Sands Projects and Upgrader Map ³⁶ Exhibit 011-014, the
2 ALCES III Scenario Modelling ³⁷ Exhibit 017-0160, the
3 Dover EIA ³⁸ Exhibit 017-024, the TECK EIA ³⁹ Transcript Volume
4 13, p. 3124, l. 22 to p. 3142, l. 1-14, and TEMF ⁴⁰ Exhibit 001-016BB,
5 all provide evidence of a region that is highly
6 impacted and will be increasingly impacted as more
7 projects appear on the landscape.

8 To put it in perspective, back in 2007, the
9 TEMF concluded that we have already or will soon
10 have species going below minus 10 percent the
11 Natural Range of Variability. That was five years
12 ago, before we had many of the existing and
13 approved projects that are considered in this
14 assessment. At that time, the TEMF also called for
15 immediate management action to reverse the
16 declines, which hasn't happened, so presumably the
17 declines are continuing. More recent EIAs within
18 the RSA confirm that to be the case. For example,
19 the TEK analysis determined that a number of
20 species were being driven well below the lower
21 boundary of their NRV, some down as low as 40 to
22 50 percent below. ⁴¹ Transcript Volume 13, p. 3142, l. 25 to
23 p. 3143, l. 14

24 Now, Shell has not provided information to
25 support its assertion that the RSA has the carrying

1 capacity to handle more development. Rather,
2 Environment Canada has stated that it is concerned
3 about the level of habitat loss that Shell has
4 identified in the Cumulative Effects Assessment
5 both at their Base Case and their Planned
6 Development Case, and that those numbers appear to
7 be very high. ^{42 Transcript Volume 14, p. 3609, l. 13-20}

8 Environment Canada also stated that there have
9 already been substantial effects on habitat and
10 that there is no evidence that there would be
11 surplus habitat available within the RSA.

12 ^{43 Transcript Volume 14, p. 3632, l. 18 to p. 3633, l. 4}

13 Now, this morning, Mr. Denstedt has stated
14 that looking at effects from the Pre-Industrial
15 Case to the Planned Development Case should not be
16 considered by the Panel and that that assessment is
17 only useful for regional planning purposes.

18 With all due respect, that assumption is
19 ludicrous. It ignores the fact that the Panel's
20 Terms of Reference specifically require a
21 cumulative effects assessment that includes a
22 Pre-Industrial Case and future foreseeable projects
23 and activities. It also ignores the duty of the
24 Panel to assess the significance of those
25 cumulative effects.

1 The Planned Development Case Cumulative
2 Effects Assessment prepared for this Project cannot
3 simply be dismissed by the Panel, it's something
4 that should be considered on another day by another
5 decision maker.

6 It was prepared for this Project Assessment
7 in order to enable this Panel to discharge its duty
8 to assess whether the cumulative effects outlined
9 in the Planned Development Case is significant.

10 As set out in the CEAA Practitioners Guide,
11 cumulative effects assessment are done to ensure
12 the incremental effects resulting from the combined
13 influence of various actions are assessed.

14 The incremental effects may be significant
15 even though the effects of each action, when
16 independently assessed are considered
17 insignificant.

18

19 **Impacts Not Considered**

44 Transcript Volume 14, p. 6313, l. 3-19 and

20 45 Exhibit 017-016

21 **Lack of Mitigation**

22 Now, clearly the scenario presented in the
23 cumulative effects assessment is one where
24 incremental effects are significant, of which this
25 Project is a contributor.

1 So despite the significant impacts to
2 terrestrial resources, Shell has not proffered
3 measures that will adequately mitigate the impacts
4 of the Project on terrestrial resources. Shell is
5 relying substantially on reclamation efforts to
6 mitigate the effects of the Project. However, no
7 evidence has been presented that reclamation
8 efforts will likely be successful.

9 As stated by Mr. Wiacek during the hearing:

10
11 "And there's also a great
12 deal of uncertainty regarding
13 reclamation in terms of whether or
14 not certain species, including
15 species at risk, will recolonize
16 some of those habitats in the
17 long-term; right now, we don't have
18 any evidence to suggest that that
19 will occur." ⁴⁶ Transcript Volume 13,
20 p. 3124, l. 18-23

21
22 Such uncertainty exists for various
23 terrestrial resources, including old-growth
24 forests. ⁴⁷ Transcript Volume 14, p. 3640, l. 6-9 Now even
25 assuming that the species that rely on old-growth

1 forests are able to recolonize those areas after
2 reclamation, there will be a considerable time lag
3 before recolonization, basically in excess of
4 100 years. ^{48 Transcript Volume 14, p. 3640, l. 2-6} But Shell
5 has not provided mitigation for the species that
6 rely on that habitat in the interim, other than to
7 suggest that they can find suitable habitat
8 somewhere else in the RSA. ^{49 Transcript Volume 14, p. 3633,}
9 ^{l. 1-4} That proposal is not borne out by the
10 evidence as the RSA does not have surplus habitat
11 available to support those species. ^{50 Transcript Volume}
12 ^{14, p. 3632, l. 18 to p. 3633, l. 4}

13 In its Opening Statements back in Fort
14 McMurray, Shell claimed that the Project will have:
15 "No unacceptable long-term environmental effects
16 upon closure and reclamation." ^{51 Transcript Volume 3,}
17 ^{p. 232, l. 9-12} Such a conclusion cannot possibly be
18 drawn. For example, Shell admits that it
19 anticipates large decreases in wetlands given their
20 current inability to be reclaimed. ^{52 Transcript}
21 ^{Volume 3, p. 265, l. 8-11}

22 Shell also stated that with losses of
23 wetlands come losses in high biodiversity potential
24 area, reductions in rare plants in these wetlands,
25 and reductions in habitats for species like rusty

1 blackbird, horned grebe and yellow rail. ^{53 Transcript}

2 Volume 3, p. 265, l. 11-15

3 In general, Shell admits that the reclaimed
4 landscape will support a lower level of
5 biodiversity comparative to the predevelopment
6 landscape. ^{54 Transcript Volume 13, p. 3129, l. 5-12}

7 Despite such losses, Shell refuses to
8 implement sufficient mitigation. As pointed out by
9 Environment Canada:

10

11 "There's insufficient
12 mitigation to avoid and lessen
13 effects on species at risk and
14 therefore our recommendation is for
15 additional mitigation." ^{55 Transcript}

16 Volume 13, p. 3133, l. 5-17

17

18 Shell has refused to include additional
19 mitigation in the form of compensation offsets.

20 Shell has refused despite the fact that there
21 will be losses that are irreversible, particularly
22 for peatlands.

23 Shell has refused despite the fact that
24 numerous species rely on such habitat including
25 species at risks.

1 Shell has refused despite the Federal
2 Government's request for additional mitigation and
3 its suggestion that offsets should be considered in
4 the event that effects are not avoided or
5 minimized. ⁵⁶ Transcript Volume 13, p. 3150, l. 612; p. 3234, l. 1-14
6 Which we know will not be happening as planned in
7 this assessment.

8 Finally, Shell has refused despite the fact
9 that Environment Canada stated that Shell has not
10 provided enough in the way of mitigation that it
11 does not have to consider offsets. ⁵⁷ Transcript
12 Volume 14, p. 3639, l. 11 to p. 3640, l. 14

13 Shell's rationale for failing to include
14 offsets as part of its mitigation is that the
15 effects won't be significant, except for woodland
16 caribou and the black-throated green warbler.
17 ⁵⁸ Exhibit 001-070, p. 9 So it does not get to determine
18 whether effects are significant, thereby
19 necessitating mitigation.

20 Further, such an approach would be contrary
21 to the Total decision which found that any impacts
22 on species at risk are significant.

23 Also, as required under **SARA**, all adverse
24 effects of species at risk should be mitigated.

25 Shell provides a similar rationale for

1 refusing to avoid drawdown effects to the unique
2 lenticular patterned fen in the northeastern corner
3 of the LSA during construction and operation, of
4 which 16 percent will be directly affected by mine
5 clearing and the remaining 84 percent being
6 affected by drawdown.

7 Although the fen may provide suitable habitat
8 for several federally-listed species, including the
9 yellow rail, Shell is refusing to avoid drawdown
10 effects to the fen as recommended by Environment
11 Canada because, in its opinion, it is very unlikely
12 that resilience of yellow rail populations in the
13 RSA has been affected.

14 As just outlined, such an approach is
15 unacceptable and not supported in law. In any
16 event, Shell has not provided sufficient evidence
17 to support that assertion. ^{59 Exhibit 001-070, p. 7-8}

18 Finally, Shell employs a circular argument to
19 get around having to provide mitigation measures.
20 So it states that effects of the Project must be
21 assessed at the RSA level. But then RSA impacts
22 are best addressed by LARP. But there are no LARP
23 protected areas in the LSA, maybe 2 per cent, and
24 there are also no management frameworks in place.
25 The end result is that there's no mitigation of

1 effects. 60 Transcript Volume 8, p. 1595, l. 24 to p. 1596, l. 13

2 In sum, we submit that given the evidence, it
3 cannot be concluded that adequate mitigation has
4 been proffered by Shell with respect to terrestrial
5 impacts.

6

7 **Conditions**

8 If the Panel conclude that the Project is in
9 the public interest, we submit that approvals for
10 the Project should not be granted until the
11 biodiversity and landscape management frameworks
12 are implemented.

13 Shell should also be required to develop and
14 submit a verifiable mitigation strategy for
15 compensatory offsite offsets in order to achieve a
16 Net Positive impact on habitat for species at risk
17 and other valued wildlife species.

18 A similar mitigation plan should also be
19 included for wetlands and old-growth forests as a
20 condition to any approvals. And we provide details
21 of what should be included in such a plan in our
22 October 1st submissions.

23 We also ask that the Panel and participants
24 should be provided with an opportunity to review
25 and test the adequacy of those mitigation

1 strategies prior to granting of any approvals.

2 So, Mr. Chairman, it's only been half an
3 hour, but I'm almost halfway through. I look to
4 you for direction as to what you prefer to do.

5 THE CHAIRMAN: That's fine. Ms. Gorrie,
6 thanks for -- thanks everyone, in fact, for helping
7 us along with the schedule, and I was going to ask
8 if there would be any objection to starting at 8:00
9 tomorrow? I don't see anyone... Oh-oh.

10 MR. PERKINS: I don't rise to object, sir.
11 I just thought I might mention this. We've juggled
12 the schedule as counsel had discussed it, and it
13 has impacts on tomorrow. Specifically, OSEC was to
14 follow Mikisew Cree and also Ms. Johnston, and I
15 wonder if it's worthwhile for counsel to discuss
16 Ms. Gorrie, in particular, jumping the queue to
17 wrap up -- I shouldn't say it that way -- to
18 complete her argument before those other parties
19 can proceed.

20 THE CHAIRMAN: Well, I was going to give
21 Ms. Gorrie the option because if she carries on,
22 then she gets a double-whammy; she has to go late
23 and then she has to start early. So, yes, if
24 counsel can work that out, that would be great.

25 So we'll start at 8 o'clock tomorrow. Have a

1 good evening.

2

3 (The Hearing Adjourned at 6:30 p.m.)

4 (The Hearing to Reconvene at 8:00 a.m.

5 on Wednesday, November 21st, 2012)

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