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Pierre River Mine Project Joint Review Panel
Canadian Environmental Assessment Agency
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Attention: Mr Alex Bolton – Joint Review Panel Chairman

RE: Pierre River Mine Project
CEAR Reference Number No: 59539
Request for Delay in Application Process

The purpose of this letter is twofold: first, to inform the Joint Review Panel ("JRP") of changes in Shell's plan for the Pierre River Mine project ("PRM" or the "Project"); and second, to respond to the submissions of parties on the adequacy of the information filed by Shell in October 2013 with respect to the Project.

Shell is currently re-evaluating the timing of various asset developments with a focus on maintaining a competitive business and successful delivery of near-term growth projects. Shell has determined that it will need to adjust the development timing for PRM. Although the extent of such a change in timing is not yet known, information that has been filed in support of the Project Application, such as the Environmental Impact Assessment, may no longer be accurate and will require updates. Until the implications of these changes are understood and Shell's evidence has been updated, Shell is not prepared to proceed to a hearing on the Project. In order to conduct a proper review and evaluation of the PRM development plans, Shell proposes that the regulatory review process for the Project be suspended, in accordance with subsections 126(6) and 44(2) of the *Canadian Environmental Assessment Act, 2012* ("CEAA 2012") and section 16 of Part IV of the amended JRP terms of reference ("TOR"). Shell will provide to the JRP an update on its internal evaluations in one year from the date of this letter.

With respect to the submissions that have been filed regarding the adequacy of Shell's responses to the JRP's Supplemental Information Requests in October 2013, Shell's response to those comments is attached as Schedule 'A'. In Shell's view, the level of information provided to date in support of the Project is more than sufficient to meet the TOR and the requirements of the CEAA 2012. Again, however, this evidence must be updated based on the changes in development timing described above before Shell is prepared to proceed to a hearing on the Project.

Should you have any questions, please do not hesitate to contact Gary Millard via e-mail <contact information removed> or telephone <contact information removed>

Yours truly,

<original signed by>

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Schedule "A" – Responses to Submissions on Adequacy of Additional Information filed by Shell

Shell has reviewed the submissions filed by Fisheries and Oceans Canada ("DFO"),[1] Environment Canada ("EC"),[2] Health Canada ("HC"),[3] Transport Canada,[4] Natural Resources Canada ("NRCAN"),[5] the Oil Sands Environmental Coalition ("OSEC"),[6] Athabasca Chipewyan First Nation ("ACFN"),[7] Métis Nation of Alberta, Region 1 ("MNA"),[8] Fort McMurray Métis Local 1935 ("Métis Local 1935"),[9] and the Non-Status Fort McMurray/Fort McKay First Nation ("NSFMFMFN")[10] regarding the adequacy of additional information filed by Shell in October 2013.

At the outset, Shell notes that several of the above submissions allege that Shell's evidence in support of the Project is insufficient to satisfy the Panel's terms of reference ("TOR"). The basis for these submissions, however, is not that Shell has failed to provide necessary evidence but that parties disagree with the methodologies or conclusions contained in Shell's evidence. The amount of evidence that Shell has filed in support of the Project is unprecedented and exceeds what was filed in support of Shell's recently approved Jackpine Mine Expansion ("JPME") Project, which was based on the same terms of reference as the Project. Shell prepared an Environmental Impact Assessment ("EIA") in 2007 for the Project in accordance with terms of reference that were established by Alberta Environment through consultation with the federal government and potentially affected Aboriginal groups. After three rounds of Supplemental Information Requests, Alberta Environment deemed that those terms of reference were sufficiently addressed in October 2010. Shell has also responded to additional information requests from the federal government and the Joint Review Panel ("JRP" or the "Panel") to satisfy the Panel's TOR. Shell's latest filing in October 2013 alone

[1] DFO's Submission dated January 16, 2014.

[2] EC's Submission dated January 17, 2014.

[3] HC's Submission dated December 16, 2013.

[4] Transport Canada's Submission dated January 17, 2014.

[5] NRCAN's Submission dated January 16, 2014.

[6] OSEC's Submission dated January 10, 2014.

[7] ACFN's Submission dated January 17, 2014.

[8] MNA's Submission dated January 17, 2014.

[9] Métis Local 1935's Submission dated January 17, 2014.

[10] NSFMFMFN's Submission dated January 17, 2014.

consisted of more than 2000 pages of detailed evidence, addressing information requested from the JRP as well as issues that arose during the hearing and JRP Report for the JPME Project.

In Shell's view, the level of information provided to date in support of the Project is more than sufficient to meet the TOR and the requirements of the *Canadian Environmental Assessment Act, 2012* ("CEAA 2012"). Given the refinements to the Project described in the cover letter to this submission, however, Shell's evidence will require further updates before Shell is prepared to proceed to a hearing for the Project.

Below are Shell's specific responses to each of the above submissions. While Shell maintains that the evidence filed to date is sufficient to address the TOR, Shell has taken this opportunity to provide clarification and amplification of certain evidence that Shell has already filed on the record in order to frame and clarify certain issues.

Federal Authorities

The Department of Justice has compiled comments from all of the federal authorities. Shell's response to each of these comments is as follows:

Fisheries and Oceans Canada, Health Canada and Natural Resources Canada

DFO, HC, and NRCAN have indicated that sufficient information exists to progress the PRM application to a public hearing.

Transport Canada

Transport Canada has expressed concern that Shell did not explicitly state the impact on navigation in its updated cumulative effects assessment that was filed in October 2013. The water level decrease predicted between the 2013 Base Case and the 2013 Planned Development Case ("PDC") is up to 19 cm (14 cm of which is attributed to climate change), which, when compared to a natural variation in water levels (during an average year) of about 1.7 m, is not expected to affect navigability of the Athabasca River (JRP SIR 28, October 2013 PRM JRP Supplemental Information Requests). The effect of the PRM project is predicted to be up to a 1 cm decrease (difference between the 2013 Base Case and 2013 PRM Application Case) in water levels in the Athabasca River which is not expected to affect navigability (JRP SIR 28, October 2013 PRM JRP Supplemental Information Requests). Considering only the maximum withdrawal rate for PRM, the reduction of water level in the Athabasca sector of the Peace-Athabasca Delta due to PRM will be less than 0.1cm (Appendix 3.4, Section 3.2.2.3, October 2013 PRM JRP Supplemental Information Requests). This decrease is not expected to affect navigability in the Peace-Athabasca Delta.

Environment Canada

EC has identified a variety of Shell's responses to the JRP's Supplemental Information Requests in October 2013 for which further explanation and/or justification is requested.

In Shell's view, the majority of the issues raised by EC are matters of disagreement between scientists and do not reflect a gap in evidence. Like all other parties, EC may file its own evidence in advance of the eventual hearing for the Project and may test Shell's evidence through cross-examination. EC may also make arguments to the JRP about additional information that EC believes is necessary to understand the effects of the Project. Shell submits that none of the matters raised by EC represent deficiencies that must be addressed through additional information before the TOR can be met.

The following are Shell's specific responses to the "outstanding information" identified in EC's submission:

1. EC has requested (i) information about Shell's mitigation plans for the Project to minimize or reduce greenhouse gas ("GHG") emissions, and (ii) estimates of GHG emissions for the 2013 PDC. Shell has already provided information on several occasions describing its plans to reduce GHG emissions for the Project, including selecting natural gas cogeneration instead of asphaltene recovery (see May 2009 PRM R1 ERCB SIRs 161a, 164a, and 175a and AENV SIR 239a and b; April 2010 PRM R2 AENV SIR 32a). In Shell's view, this information already on the record sufficiently addresses the TOR. With respect to (ii), Shell will provide the JRP an estimate of GHG emissions for the 2013 PDC in advance of the eventual hearing for the Project (taking into account any updates to the Project development plans at that time).

2. EC has requested additional information about Shell's proposed mine fleet. The PRM mine fleet emission estimations in both the 2007 EIA and in Shell's responses to the PRM JRP Supplemental Information Requests were based on the assumption that the entire PRM mine fleet will be equipped with Tier 4 engines from the first year of production (2021). The rest of the assumptions used to estimate the PRM mine fleet emissions were described in the 2007 EIA, Volume 3, Appendix 3-8, Section 3.3. A list of the major mine equipment for the Project including the quantity of equipment is presented in the 2007 EIA, Volume 2, Section 5.9, Table 5-13. In Shell's view, this information sufficiently addresses the TOR.

3. EC has requested additional information on Shell's methodology used to calculate fugitive air emissions. Shell has provided information on its approach to fugitive emissions estimation for air pollutants in the 2007 EIA, Volume 3, Appendix 3-8, Section 3.2.1.5. Additional information was provided in the December 2009 response to Jackpine Mine Expansion Round 1 AENV SIR 223a. In Shell's view, the additional information requested by EC is not necessary to meet the TOR.

4. EC has reiterated its previous request to the JRP for an updated and expanded water quality model for the Project. Shell believes that the water quality model used in the 2007 EIA, and updated in the October 2013 PRM JRP Supplemental Information Requests (discussed in Appendix 2, Section 2.3.3, Section 3.3.1, Section 4.2 and Section 5.2), is sufficient to address the TOR. Shell will be

prepared to defend the appropriateness of this model at the eventual hearing for the Project.

5. EC has requested additional information about chronic effects benchmarks, particularly in relation to naphthenic acids, and Shell's plans for monitoring chronic and acute toxicity. With respect to naphthenic acids, Shell agrees with EC that developing thresholds for naphthenic acids should be a goal of research efforts, but additional studies are required before meaningful thresholds can be developed. Shell has initiated and funded research on naphthenic acids toxicity, but believes that its approach to naphthenic acids in the EIA is appropriate pending the outcome of further research. With respect to Shell's approach to monitoring, chronic and acute toxicity will be included in Shell's compliance monitoring in accordance with its *Environmental Protection and Enhancement Act* approval, as well as other Project-specific and regional monitoring programs (potentially including the monitoring required pursuant to the Decision Statement under the CEAA 2012).

6. EC has requested that Shell (i) re-evaluate various aspects of its environmental assessment for wildlife and biodiversity based on alternate methodologies, and (ii) provide further justification for the methodologies used to assess effects on wildlife and biodiversity. Shell continues to maintain that its assessment of effects on wildlife and biodiversity is appropriate and sufficient to address the TOR. Shell will be prepared to defend this assessment at the eventual hearing for the Project.

7. With respect to wildlife movement, EC has requested information about the potential for the Project to affect east-west movements of boreal woodland caribou, wood bison and moose in the Local Study Area ("LSA") and across the Athabasca River valley. Shell provided an assessment of potential effects of the Project on movement of moose and wood bison, including east-west movements, in the October 2013 PRM JRP Supplemental Information Requests (specifically, refer to Appendix 3.7, Section 4.0; Appendix 1, Section 4.4.1.3, Table 4.4-4; and, Appendix 2, Section 3.4.3.1.2, Table 3.4-10 and Section 3.4.3.1.3).

   Shell has not assessed the environmental consequences of the effects of the Project on woodland caribou because caribou are virtually absent from the LSA. The effects of the 2013 PDC on woodland caribou movements in the Regional Study Area ("RSA"), including east-west movements across the RSA, were provided in Appendix 2, Section 4.3.4.2.23, Table 4.3-35, of the October 2013 PRM JRP Supplemental Information Requests, although movement corridors between the Red Earth and Richardson caribou ranges were not directly assessed. Shell recognizes that the Project is located between the Red Earth and Richardson caribou ranges. Radio telemetry data collected by Alberta Environment and Sustainable Resource Development ("ESRD") for these two boreal woodland caribou herds suggest that the most likely location of potential movement corridors between the two ranges occurs well north of PRM (Frontier Oil Sands

Mine Project Integrated Application, Supplemental Information Request Round 2 Response to Question 96b, Figure 96b-1). Therefore, the magnitude and environmental consequence of the effects of PRM on east-west caribou movements between the Red Earth and Richardson caribou ranges are expected to be negligible. The most likely location of potential movement corridors between the two ranges also occurs north of planned development in the 2013 PDC, although some effects to movement are predicted. Therefore, the magnitude and environmental consequence of the effects of the 2013 PDC on east-west caribou movements between the Red Earth and Richardson Caribou Ranges are expected to be low.

8. EC has requested a variety of information regarding the Ronald Lake bison herd, including additional studies to: (i) define the herd range, based on seasonal movements for both males and females; (ii) determine the interaction between Ronald Lake bison and bison within Wood Buffalo National Park; (iii) determine the responses of Ronald Lake bison to winter exploration activities; and, (iv) validate Shell's wood bison habitat selection model.

   At the outset, Shell notes that wood bison in general are a thoroughly-studied and well understood species across its range in northern Canada. They are a resilient species that are capable of thriving in a wide range of ecosystems and climatic regimes (Gates et al. 2010). Historically, they were found across northern Alberta, an area considered by the National Wood Bison Recovery Team to be some of the highest quality habitat for the subspecies in its range (Gates et al. 2001). Much of that habitat remains unoccupied. Their resiliency is underscored by the success of several reintroductions into their former ranges, including the Hay-Zama herd in northwestern Alberta, the MacKenzie and Nahanni herds in the Northwest Territories and the Aishihik herd in the Yukon. The wood bison population in Canada has increased since 1987, mostly due to the establishment of new wild subpopulations within the original range. As a result, the Committee on the Status of Endangered Wildlife in Canada ("COSEWIC") recently down-listed wood bison from 'Threatened' to 'Special Concern'.

   Shell acknowledges that the additional studies requested by EC, as well as the results of studies currently being carried out with respect to the Ronald Lake bison herd, would improve knowledge about the Ronald Lake wood bison and would likely be useful to assist with long-term management of the herd. However, the amount of time and resources that would be required to carry out these studies would be significant. As discussed further below, Shell has assessed potential effects on Ronald Lake bison based on the best available information and is prepared to defend its assessment during the eventual hearing for the Project. Like any other topic, EC and other interveners may file their own evidence on Ronald Lake bison, may test Shell's evidence through cross-examination, and may make arguments to the Panel about the adequacy of this evidence during the hearing. However, Shell submits that no additional studies for Ronald Lake bison are required to satisfy the TOR.

9. EC has requested additional information regarding Project effects on Ronald Lake wood bison abundance, habitat availability and movement within their current range. Shell assessed potential Project and cumulative effects on wood bison based on the "known" and "observed" core ranges identified by Traditional Ecological Knowledge (Candler 2011). Potential effects on wood bison abundance, habitat availability and movement were assessed in Shell's October 2013 PRM JRP Supplemental Information Requests, JRP SIR 41. This assessment determined that the environmental consequences of development on the abundance of wood bison within the "known" and "observed" core ranges of the Ronald Lake herd from the Pre-Industrial Case ("PIC") to the 2013 Base Case are predicted to be negligible. The environmental consequences of development on wood bison from the PIC to the 2013 PRM Application Case and the 2013 PDC are predicted to be low. The environmental consequence of development on wood bison movement within both "known" and "observed" core ranges of the Ronald Lake herd is predicted to be high from the PIC to the 2013 Base Case, the 2013 PRM Application Case, and the 2013 PDC.

   With respect to habitat availability, the magnitude and environmental consequence of the decline of high suitability wood bison habitat within the combined "known" and "observed" core ranges of the Ronald Lake herd within the RSA is predicted to be low from the PIC to the 2013 Base Case, moderate from the PIC to the 2013 PRM Application Case, and high from the PIC to the 2013 PDC (see Table 1 below). Although 17% of the "known" and "observed" core Ronald Lake bison range is outside of the RSA and therefore outside of the habitat modelling depicted in Table 1, anthropogenic disturbances (i.e., 'nil' habitat) takes up only 2% of the herd range outside of the RSA, compared to 4% of the herd's range inside the RSA. Therefore, estimates of the percentage of high suitability habitat loss for Ronald Lake bison are expected to be conservative.

Table 1 Ronald Lake Wood Bison Habitat Change Within "Known" and "Observed" Core Range from the Pre-Industrial Case to the 2013 PRM Application Case in the Regional Study Area

Key Indicator Resource	Habitat Suitability Class	Pre-Industrial Case		Change from the Pre-Industrial Case to the 2013 Base Case		Change from the Pre-Industrial Case to the 2013 PRM Application Case		Change from the Pre-Industrial Case to the 2013 Planned Development Case		Change from the 2013 Base Case to the 2013 PRM Application Case	
		Habitat Area [ha]	% of Total Area	Area [ha]	[%]	Area [ha]	[%]	Area [ha]	[%]	Area [ha]	[%]
Ronald Lake Wood Bison	high	15,487	9	-1,423	-9	-2,177	-14	-7,685	-50	-754	-5
	moderate	52,372	30	-289	>-1	-880	-2	-11,140	-21	-591	-1
	low	39,199	23	2,360	6	1,393	4	-5,475	-14	-967	-2
	nil	37,567	22	-648	-2	1,664	4	24,301	65	2312	6
	outside model area	28,913	17	0	0	0	0	0	0	0	0

High suitability habitat within "known" and "observed" core range of the Ronald Lake bison herd has declined over time, and is predicted to continue to decline in the 2013 PDC. However, given that PRM overlaps minimally with the herd's core range, historical wood bison range extends north and west well beyond the boundary of the Ronald Lake herd's current "known" and "observed" range and extensive potential wood bison habitat exists beyond this current range, and (as outlined in Shell's response to JRP SIR 41) the majority (88%) of high quality habitat present in the PIC remains available in the RSA, the Ronald Lake bison herd is unlikely to be limited by habitat availability as a result of the Project or cumulative effects. There currently is no evidence that the Ronald Lake bison herd is decreasing (Government of Alberta 2013). Rather some combination of the effects of predation, disease (e.g., bovine tuberculosis, bovine brucellosis, anthrax), and unregulated hunting within the "known" and "observed" core ranges of the Ronald Lake bison herd are more likely to be limiting the size of the herd.

The Project and planned development in the 2013 PDC are unlikely to change bison abundance as a result of increasing predation rates. If recent history in the Oil Sands Region can be used as a guide, as development occurs in the region, white-tailed deer numbers may increase followed by an increase in the number of wolves (Latham et al 2011). If wolf numbers increase, then there is the potential for increased wolf predation on bison. However, wolves are opportunistic predators and with alternate prey available, wolves will preferentially target easier prey such as white-tailed deer. This appears to be the case in the southern portion of the West Side of the Athabasca woodland caribou range where increased white-tailed deer and wolf densities did not affect moose densities and wolf consumption of moose actually declined (Latham et al. 2011). As a result, the

Project and planned development are unlikely to affect bison abundance as a result of increasing predation rates.

The potential for the Project and planned development in the 2013 PDC to materially change the disease rates in the Ronald Lake bison herd is uncertain. Radio telemetry data collected by ESRD already indicates that the Ronald Lake bison herd travels north into the southern portion of Wood Buffalo National Park ("WBNP") and yet based on preliminary disease testing, the Ronald Lake herd appears to have bovine tuberculosis and bovine brucellosis infection rates that are substantially lower than those recorded in WBNP wood bison (Government of Alberta 2013, Joly and Messier 2004). Although the Ronald Lake bison herd appears to use the south end of WBNP, these same areas may not be used by diseased WBNP wood bison based on published maps of herd locations within WBNP (e.g., Mitchell and Gates 2002, Jensen et al. 2004). If the Ronald Lake bison herd spends more time in the south end of WBNP as a result of the Project or planned development than the herd does currently, then contact with diseased individuals from the WBNP herds could increase. However, whether or not this will have any effect on the abundance of the Ronald Lake bison herd is unclear. For example, Bradley and Wilmhurst (2005) analyzed the factors associated with the decline of wood bison in WBNP between 1971 and 1999 and concluded that the decline would have occurred whether or not the bison herd was diseased. In addition, they noted that the WBNP wood bison population trend following 1999 was one of rapid increase, even in the presence of disease. Based on the above information, the Project and planned development in the 2013 PDC have the potential to affect disease rates for the Ronald Lake bison herd but appear unlikely to affect the abundance of the herd.

Finally, the Project and planned development in the 2013 PDC are unlikely to change the incidence of unregulated hunting mortality because hunting access will be limited in the immediate area of the Project and the other planned developments in the Ronald Lake herd range. In particular, Shell has committed to establishing access controls to reduce the potential for increased access that could result in increased unregulated hunting.

The following discusses the effects of changes within the "known" and "observed" core ranges to the Ronald Lake bison herd in terms of adverse, significant and likely effects from the PIC to the 2013 PRM Application Case and the 2013 PDC.

- Effects on Ronald Lake wood bison within the "known" and "observed" core wood bison ranges are considered Adverse effects.

- The environmental consequence ratings for these effects on the Ronald Lake wood bison herd are low. The Ronald Lake wood bison herd is likely limited by disease, predation and unregulated hunting, rather than habitat loss, and there is no evidence that herd is decreasing, despite unregulated

hunting on the herd. The cumulative effects of development in the range of the Ronald Lake wood bison herd are not likely to exceed ecological thresholds and compromise resilience and adaptability of the Ronald Lake wood bison herd such that it would no longer be a self-sustaining and ecologically effective population. Therefore, these are considered Not Significant effects.

- The predicted effect is considered Likely.

Therefore, the environmental effects of development on the Ronald Lake wood bison herd are considered Likely, Adverse and Not Significant.

References

Bradley, M. and J. Wilmshurst. 2014. The Fall and Rise of Bison Populations in Wood Buffalo National Park: 1971 to 2003. Canadian Journal of Zoology. 83:1195-1205 (2005).

Candler, C. 2011. Athabasca Chipewyan First Nation Knowledge and Use Report and Assessment for Shell Canada's Proposed Redclay Compensation Lake. Prepared by Firelight Group Research Cooperative. 121 pp.

Gates, C.C., C.H. Freese, P.J.P. Gogan and M. Kotzman. 2010. American Bison: Status Survey and Conservation Guidelines 2010. International Union for the Conservation of Nature Species Survival Commission (IUCN/SSC) American Bison Specialist Group. Gland, Switzerland. 154 pp. ISBN: 978-2-8317-1149-2.

Gates, C.C., R.O. Stephenson, H.W. Reynolds, C.G. van Zyll de Jong, H. Schwantje, M. Hoefs, J. Nishi, N. Cool, J. Chisholm, A. James and B. Koonz. 2001. National Recovery Plan for the Wood Bison (Bison bison athabascae). National Recovery Plan No. 21. Recovery of Nationally Endangered Wildlife (RENEW). Ottawa, ON. 50 pp. ISBN: 0-662-29640-0; Cat. NO. CW66-11/21-2001E.

Government of Alberta. 2013. Ronald Lake bison (Bison bison): winter 2012-2013 activities. Progress report (final). 39 pp.

Jensen, O.C., J. Nishi, N.L. Cool, D. Poll, and H.W. Reynolds. 2004. Assessing Suitable and Critical Habitat for Wood Bison (Bison bison athabascae) Using Geographical Information System (GIS) and Remote Sensing: Preliminary Results. In Proceedings of Species at Risk 2004 Pathways to Recovery Conference. March 2 to 6, 2004, Victoria, BC. p. 18.

Joly, D.O. and F. Messier. 2004. Factors Affecting Apparent Prevalence of Tuberculosis and Brucellosis in Wood Bison. Journal of Animal Ecology. 73, 623-631.

Latham, A.D.M., C.M. Latham, N.A. McCutchen and S. Boutin. 2011. Invading White-Tailed Deer Change Wolf-Caribou Dynamics in Northeastern Alberta. Journal of Wildlife Management. 75 (1):204-212.

Mitchell, J.A. and C.C. Gates. 2002. Status of Wood Bison (Bison bison athabascae) in Alberta. Alberta Sustainable Resource Development, Fish and Wildlife Division, and Alberta Conservation Association, Wildlife Status Report No. 38. Edmonton, AB. 32 pp. ISBN: 0-7785-1838-8 (printed edition); 0-7785-1839-6(on-line edition); Publication NO. T/007.

10. EC has requested additional justification for Shell's methodology for assessing impacts on peatlands and patterned fens, and a revised assessment based on an alternate methodology. Shell believes that its assessment of effects on peatlands and patterned fens is appropriate and sufficient to address the TOR. Shell will be prepared to defend this assessment and methodology at the eventual hearing for the Project.

11. EC has requested additional explanation of Shell's methodology for assessing wildlife health risks. Shell believes that its assessment of potential wildlife health risks is appropriate and will be prepared to defend its assessment and methodology at the eventual hearing for the Project.

12. EC has requested additional analyses of worst-case scenarios and explanations of Shell's proposed mitigation plans in the event of an accident or malfunction. Shell has already provided extensive information on potential accidents and malfunctions associated with the Project, as well as its proposed plans to prevent such events and mitigation measures that will be implemented in the unlikely case such an event occurs (for example, see the May 2011 Submission of Information to the Joint Review Panel, Section 3.2; as well as Shell's October 2013 PRM JRP Supplemental Information Requests JRP SIR 73). In Shell's view, this information is more than sufficient to address the TOR.

Oil Sands Environmental Coalition ("OSEC")

OSEC's submission consists of a variety of questions posed to Shell, none of which identify gaps in Shell's fulfillment of the TOR but rather reflect OSEC's disagreement with the conclusions or sufficiency of Shell's evidence. To the extent that the questions posed by OSEC are relevant to the Panel, those questions can be posed to Shell through cross-examination during the hearing, OSEC may file evidence on those matters in advance of the hearing (which will also be subject to cross-examination) and OSEC may raise those matters in its final argument. However, none of this information is required to satisfy the TOR.

The following are Shell's specific responses to the matters identified in OSEC's submission where it is alleged that Shell has not complied with the TOR:

1. At page 10 of OSEC's submission, OSEC requests additional information about Shell's plans to prevent, minimize or mitigate the Project-specific effects on wetlands. In the 2007 EIA, Volume 2, Section 20.3, Shell outlines its reclamation planning process which includes following the Guideline for Wetland Establishment on Reclaimed Oil Sands Leases (CEMA 2007) and adaptively managing reclaimed landscapes for ecological functionality. Current wetlands reclamation will allow for the reestablishment of wetlands such as marshes and wet shrublands within the closure landscape. These reclaimed ecosystems are expected to develop into biologically diverse, mature stages containing boreal forest species suitable for traditional land uses, wildlife use, as well as other end land uses (see May 2009 PRM R1 AENV SIR 294d; April 2010 PRM R2 AENV SIR 27a-d, 34c-d, 37a and 38b).

   In addition to its current work on riparian wetlands, Shell has committed, within its reclamation research program, to the development of specific practices appropriate for reclamation of organic wetlands (fens and bogs) and riparian ecosystems (May 2009 PRM R1 AENV SIRs 402b-c, Figure 402-2; 437a; 446a; and 456c). Shell will also examine its proposed mine plan for potential areas that could be redesigned to allow for development of fens, bogs and riparian wetlands.

   In Shell's view, this information is more than sufficient to address the TOR.

2. At page 10 of OSEC's submission, OSEC requests additional information on Shell's plans to mitigate species at risk and other valued ecosystem components. JRP SIR 43, Table 43-2 in the October 2013 PRM JRP Supplemental Information Requests lists mitigations that will reduce impacts to federally listed species at risk. In addition, Appendix 2, Section 4.3.7 in the October 2013 PRM JRP Supplemental Information Request responses discusses additional potential mitigation for terrestrial effects in terms of biodiversity offsets. In Shell's view, this information is more than sufficient to address the TOR.

Athabasca Chipewyan First Nation ("ACFN")

ACFN's submission also reflects a disagreement over the evidence that Shell has filed (and is better suited for an evidentiary filing) and does not relate to the sufficiency of Shell's evidence. Like other interveners, if ACFN disagrees with Shell's evidence or methodology ACFN may file its own evidence, test Shell's evidence through cross-examination during the hearing and make final submissions to the Panel in relation to that evidence. However, none of the matters raised by ACFN represent deficiencies that must be addressed in order to satisfy the TOR.

Further, with respect to ACFN's submissions on Aboriginal rights and consultation, Shell's consultation efforts and support to ACFN have been extensive as demonstrated in the information filed on the CEAA Registry.[11] Again, while ACFN may seek to challenge

[11] For example, see CEAR 155.

this evidence during the hearing and may wish to file evidence of its own, ACFN has not identified any gap in the evidence that must be filled in order to satisfy the TOR.

Métis Nation of Alberta, Region 1 and Fort McMurray Métis Local 1935

The submissions by both MNA and Métis Local 1935 relate primarily to consultation and Métis rights. Shell's approach to consultation with potentially impacted Métis locals has previously been discussed with MNA, and was discussed during the JPME hearing. Shell has consulted with all potentially affected Aboriginal groups identified by the Federal and Provincial governments, including Métis, as well as other groups that Shell has self identified or who have requested consultation, to ensure that all potentially impacted Aboriginal groups have had an opportunity to have meaningful consultation with respect to the Project. Shell has filed extensive records with the Panel with respect to its consultation with all potentially affected Aboriginal groups.[12] In addition, as the Panel is aware (and as the TOR make clear), the Courts have determined that the environmental assessment process itself is a valuable part of the consultation process.[13] An Aboriginal group such as MNA or Métis Local 1935 that desires to have additional information put in front of the Panel in respect of how its rights, and the exercise of those rights, may be affected, can present those submissions to the Panel to ensure their concerns are heard.

Non-Status Fort McMurray/Fort McKay First Nation ("NSFMFMFN")

The NSFMFMFN submission consists of argument regarding Shell's evidence. These issues can be addressed at the eventual hearing for the Project.

[12] *Ibid*.

[13] *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director*) 2004 SCC 74.