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Re: Review of The Environmental Assessment Report and Potential Conditions for the Central Ridge Exploration Drilling Project

Ms. Addison,

KMKNO has reviewed the Draft Environmental Assessment Report and Potential Conditions for the Central Ridge Exploration Drilling Project. I wish to provide you with our comments, concerns and recommendations. KMKNO has asked UINR to conduct a review of the draft EA and we have submitted the UINR review to the Impact Assessment Agency of Canada (IAAC).

The Mi'kmaq are the holders of constitutionally protected Aboriginal and treaty rights, which include the Aboriginal right to fish for food and the Treaty right to fish for a moderate livelihood. Any impacts to fish and fish habitat are impacts to Mi'kmaw rights. Therefore, it is our expectation that the Proponent and regulators will take mitigative measures to reduce potential adverse impacts to Mi'kmaq rights, practice the precautionary principle to address scientific unknowns, and compensate the Mi'kmaq for any infringement on fishing rights.

As detailed within the UINR review of the Central Ridge EIS, we asked that regulators and the Proponent provide specific additional information to improve clarity, address several cases of misinterpretation of information, address gaps in identified mitigation, expand participation of Indigenous peoples in the co-development of monitoring, and improve mitigation measures based on shared values, incorporation of temporal and adaptive management strategies, and improved coordination with the adjacent oil and gas operations. As stated in the UINR review of the Central Ridge EA, the Agency has failed to adequately meet these recommendations. UINR went on to identify several areas where Indigenous knowledge systems, and thus the use of Two Eyed Seeing, can be incorporated:

- the conditions issued under the *Canadian Environmental Assessment Act*;
- the co-development of monitoring and assessment plans and testing of traditional foods;
- expanding the principles for the protection of migratory birds to marine life;
- adapting operational plans, guidelines, and regulations based on experience;

- updating of industry standards and guidelines; and
- initiating in forms of reciprocity where the proponent gives back for what is taken or lost such as in contributing to charitable organizations that assist in response and recovery of marine animals.

The Agency's response also does not adequately address KMKNO's concerns and recommendations specific to Atlantic salmon and American eel. We wish to reiterate our concern that this exploration project, as well as the other concurrent offshore oil and gas developments in Newfoundland, may impact both Atlantic salmon and American eel. There is uncertainty and lack of Western Science information available on migratory patterns of Atlantic salmon and American eel in the project area, but this does not dismiss the possibility of increased pressures on already struggling species populations. A precautionary approach is important that includes restrictions on the timing and location of drilling activities to reduce potential impact to migrating fish as well as those overwintering. As the UINR review states, the Mi'kmaw culture is dependent on the relationship of the Mi'kmaq to many species, such as Atlantic salmon and the American eel, where the availability of such species is tied to the Mi'kmaq identity.

Our concerns referred to above are magnified when considering the number of exploration drilling projects being proposed in the offshore Newfoundland. This intensified development in the offshore makes it even more important that a two-eyed seeing perspective be adopted in a way that values Mi'kmaw relationships to culturally significant species, prevents harm and waste, protects habitats, embraces the precautionary principle, acknowledges the inherent values within Western science, and considers the power dynamics that limit the participation and guidance of the Mi'kmaq in managing offshore development.

We look forward to further consultation on this matter.

Yours in recognition of Mi'kmaq Rights and Title,

<Original signed by>

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cc:
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Review of the Draft Canadian Environmental Assessment Report and Potential Conditions for the Central Ridge Exploration Drilling Project

Nov. 6, 2020

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1.0 Project Description Summary

In November 2018, Equinor Canada was awarded Exploration Licenses (ELs) 1159 and 1160 in the Central Ridge area of the Canada-NL Offshore Area.

The scope of the exploration drilling on ELs 1159 and 1160 includes the drilling, testing and decommissioning/abandonment of exploratory wells (including delineation wells) using one or more drilling installation, as well as associated exploration and supporting activities. Delineation and appraisal wells refer to the same activity. The distance between individual exploration well varies as they are dependent on the results from initial wells and geophysical programs. Delineation/appraisal wells are typically completed within a radius of approximately 20 kilometres (km) from the initial exploration well.

The Flemish Pass Environmental Impact Statement (EIS) environmental effects analysis considered the drilling of up to 30 wells. Wells to be drilled on ELs 1159 and 1160 would be captured within this 30-well count. The effects assessment carried out within the Flemish Pass EIS is directly applicable to ELs 1159 and 1160, and the abridged EIS focussed on new information available since the filing of the Flemish Pass EIS. No additional wells would be drilled with the inclusion of ELs 1159 and 1160. Up to twelve wells could be drilled in total on EL 1159 and EL 1160, and the total number of wells for the Flemish Pass and Central Ridge ELs (i.e., ELs 1139, 1140, 1141, 1142, 1159, and 1160) would not exceed 24 as per the Flemish Pass EIS Decision Statement.

The purpose of exploration drilling is to determine the potential for oil and gas resources on Equinor Canada-held land holdings within the Project Area. Exploration/delineation drilling is required to determine the presence, nature and volume of potential oil and gas resources within the ELs. Exploration drilling activities on ELs 1159 and 1160 also enables the licence interest holders to meet the work expenditure commitments that must be fulfilled over the term of the licence.

This report considers the Central Ridge Exploration Drilling Project Draft Environmental Assessment Report. Equinor Canada Ltd is referred herein as “the Proponent”; the exploration drilling as “the Project”; and lastly the “Agency” refers herein as the Impact Assessment Agency of Canada.

2.0 Methodology

2.1 Scope

The Unama’ki Institute of Natural Resources (UINR) was contracted by Kwilmu’kw Mawklusuaqn Negotiation Office’s (KMKNO) to conduct a review of the Equinor Canada Ltd Central Ridge Exploration Drilling Program Abridged AIS. This review was specific to compiling a Mi’kmaq perspective regarding, but not limited to, the following key areas:

1. The potential environmental effects of the Project as described under section 5 of CEAA 2012, in particular, the potential effects from changes to the environment with respect to Aboriginal peoples on:

- the health and socio-economic conditions
- physical and cultural heritage
- current use of lands and resources for traditional purposes
- any structure, site or thing that is of historical, archaeological, paleontological or architectural significance

2. The potential impacts of the Project on established Aboriginal or treaty rights of communities represented by the KMKNO, including the ability to exercise those rights.
3. The effectiveness of the proposed mitigation measures and/or follow-up programs related to potential adverse environmental effects or impacts on the potential or established Aboriginal or treaty rights of communities represented by the KMKNO.

In addition to the key areas described above, UINR:

4. Confirmed potential impacts based on the operation.
5. Identified additional information that may be required from the proponent. And lastly,
6. Checked facts and sources used in the EIS for correct interpretation.

Following the submission of the report to KMKNO in February 2020, UINR was again contracted to review the Draft Environmental Assessment Report for the Central Ridge Exploration Drilling Project in the fall of 2020. This report is specific to the review of the Draft Environmental Assessment Report for the Central Ridge Exploration Drilling Project prepared by the Impact Assessment Agency of Canada.

2.2 Interpretive Framework: Two Eyed Seeing and the Knowledge System Approach

It is understood that Mi'kmaq rights can be directly and indirectly impacted by proponent activities. Impacts to the social health and wellbeing of the individuals or culture as a result of one, or a combination of, the following ways

i) reduction or loss of species and primary sources of prey,
ii) reduction in quantity or quality, or loss of use of, habitats which impact species ability to carry outs its biological functions and/or negatively impacts species/population level survival, and
iii) loss of traditional harvesting areas through competition of space or reduction in quality which results in loss of ability for which to harvest safely.

Using a newly emerging theoretical lens for examining how proponent activities may impact Mi'kmaq rights (Denny & Fanning, 2016a), we also employ the concept of Two Eyed Seeing as the chosen interpretive framework for this review.

2.2.1 Two Eyed Seeing

Two Eyed Seeing is a concept coined by Elder Albert Marshall of Eskasoni. He describes Two Eyed Seeing as (Bartlett, Marshall, & Marshall, 2012):

> The gift of multiple perspectives treasured by many aboriginal peoples and explains that it refers to learning to see from one eye with the *strengths* of Indigenous knowledges and ways of knowing, and from the other eye with the *strengths* of Western knowledges

> and ways of knowing, and to using both these eyes together, for the benefit of all (p. 335; emphasis in original).

Knowledge, whether it is Indigenous or western, is not only 'what' is known but includes ways of knowing. Conceptualized as a knowledge system, this approach captures the understanding that knowledge is acquired in many ways. The knowledge itself is derived from practice, adaptation, and transmission, and is informed by values derived from an underlying belief system (Giles, Fanning, Denny, & Paul, 2016; Whyte, 2013).

2.2.2 Western and Indigenous Knowledge Systems

Western knowledge is referred to as science-based knowledge (Kuhn, 2013). Generally, scientific knowledge "refers to any systematic recorded knowledge or practice" that forms the foundation for the scientific method described as the components of hypothesis, design, execution, analysis, and interpretation (Raymond et al., 2010, p. 1768). Western knowledge is generally transmitted through written forms such as peer reviewed papers, reports and presented at discipline specific conference presentations (Giles et al., 2016). Like all systems of knowledge, scientific practices are governed by values and beliefs (Longino, 1990).

The Indigenous knowledge system (IKS) is less understood by western societies (Latulippe, 2015). Indigenous societies have distinct view about what the world is like, what it consists of and why, known as a worldview (Strega, 2005). Indigenous people did not just live on the land; they believed themselves to be 'belonging' as part of an extended family of the natural landscape (Thomlinson & Crouch, 2012). The Mi'kmaq also held this belief.

The Mi'kmaq Creation Story tells a story about a web of relationships where the Mi'kmaq were simultaneously created with and from the earth. Mi'kmaq relationship was also closely linked to the animals and were referred to as brothers and sisters. Animal life is respected and not taken selfishly for fear their behaviour will be disapproved by other animals. This belief of kinship is best expressed in the Mi'kmaq phrase, "*Msit no'kmaq*" which means "All my relations" (Denny & Fanning, 2016b; Giles et al., 2016; Leblanc, 2012; McMillan & Prosper, 2016).

The governing philosophy of the Mi'kmaq was also based on relationships, not just with each other but also with neighboring nations and the natural world from which they originated. The primary means for maintaining relationships with natural resources was (and is) described through the concept of *Netukulimk*. As a Mi'kmaq value, *Netukulimk* describes the interconnection between sustainability of self, both physically and spiritually, to the natural environment. In simple terms, it is a way of life that takes into consideration the needs of those generations yet to be as a guide to prevent one from being overly indulgent or greedy. Elders describe *Netukulimk* as "take only what you need" (Barsh, 2002, p.17). The practice of *Netukulimk* is expressed as self-limitation, prevention of waste, giving back (reciprocity), and sharing of communal provisions (Denny & Fanning, 2016b). The concept of preventing harm to Mother Earth is viewed as necessary to maintain the balance and is difficult to undo once it has been done. Consequences caused by human actions may be detrimental to the collective

survival of the Mi'kmaq people and great care is taken to prevent unnecessary harm through cultural teachings. The culture itself is dependent on the relationship of the Mi'kmaq to many species, such as Atlantic salmon and the American eel, where the availability of such species is tied to the Mi'kmaq identity (Denny & Fanning, 2016b; Giles et al., 2016; Wagner, Davis, Prosper, & Paulette, 2004). Elder Albert Marshall explains,

> Mi'kmaq carry a great sense of responsibility. As all life is our relations, any loss of life is a loss of kin and spirit. The unintentional eradication of species is deeply connected to loss in cultural identity. Time on earth is merely borrowed from future generations. As such, the Mi'kmaq have the inherent responsibility to ensure all of nature's gifts are there for the next seven generations. (Denny & Fanning, 2016b).

2.2.3 Two Eyed Seeing in Context

In our experience, Two Eyed Seeing is a potential solution. Here, values specific to each perspective are negotiated while respecting the underlying beliefs of both western and Mi'kmaq knowledge systems. The integration of Mi'kmaq values of Mi'kmaw relationships to culturally significant species, preventing harm and waste, protecting water quality and habitats, and acting conservatively with the Western values of rigorous scientific methods and written transmission of knowledge are the foundation to Two Eyed Seeing interpretive framework used in this review.

While the Mi'kmaq are very much interested in the protection of all species within the area of exploration, such as marine birds, whales, and sea turtles, the focus of the review centers on how well the concerns and recommendations were captured and subsequently addressed by the Agency and identify opportunities for Two Eyed Seeing in the conditions.

As such, the questions guiding the review are:

- Were KMKNO's concerns adequately captured by the Agency?
- Did the Agency's responses adequately address KMKNO's concerns and recommendations specific to:
    - Atlantic salmon and American eel thus Mi'kmaq relationship to those species; and
    - salmon or eel habitat, either as migratory or a feeding area, or other activities necessary to complete it life cycle?
- What opportunities are available to incorporate Two Eyed Seeing in current processes such as conditions and industry guidelines?

2.3 Limitations

This report is intended as an advisory document for the KMKNO and the Assembly of Nova Scotia Mi'kmaq Chiefs (ANSMC) in preparation for the public comment period on the potential environmental effects of the Project. Given the short time frame in which to review and prepare comments, this report reflects our best judgement in consideration of the information available at the time of preparation. Without seeing comments from other indigenous

organizations, the reviewers were limited to using the report, Appendices A and C and the proposed conditions.

3.0 Results

The results of the assessment are broken down into the questions guiding this review:

1) Were KMKNO's concerns adequately captured by the Agency?
2) Did the Agency's responses adequately address KMKNO's concerns and recommendations specific to:
    a. Atlantic salmon and American eel thus Mi'kmaq relationship to those species; and
    b. salmon or eel habitat, either as migratory or a feeding area, or other activities necessary to complete it life cycle?
3) What opportunities are available to incorporate Two Eyed Seeing in current processes such as conditions and industry guidelines?

3.1 Were KMKNO's Concerns and Recommendations Adequately Captured?

The review of the abridged EIS by KMKNO concluded potential impact to Mi'kmaq culture and rights. As stated in their review (p. 20):

> Based on the results of this review, we conclude that there is potential to impact Nova Scotia Mi'kmaq culture and rights from the Central Ridge Exploration Drilling Program. Currently the program lacks mitigative measures for Atlantic salmon presence and failed to address the potential interactions with American eel, another significant cultural species for the Mi'kmaq. American eel was assessed by COSEWIC as 'threatened' in 2012. (UINR, 2020)

However, potential impacts to Mi'kmaw rights were identified as low before engaging the Mi'kmaq of Nova Scotia. As the Agency already determined the depth of consultation would be low based on their assessment of potential impacts, the exercise was an opportunity to engage Indigenous groups to identify concerns specific to culturally significant species. As stated on pages 8 to 9 of the Central Ridge Exploration Drilling Project,

> The Agency determined that the depth of consultation with the above-noted Indigenous groups would be low on the consultation spectrum based on an analysis of potential or established Aboriginal or treaty rights protected under Section 35 of the *Constitution Act*, 1982 (Section 35 Rights), and the potential for adverse effects on these rights due to the Project. The Agency provided this analysis to Indigenous groups, along with draft consultation plans, and requested feedback on the plans. Comments were received on the Agency's depth of the consultation assessment; however, the information did not result in a change to this determination (i.e., the depth of consultation remained at the low end of the spectrum throughout the EA).

This section examines whether the conclusions and recommendations were addressed by the Agency. The KMKNO review resulted in 57 comments that were categorized as five groups of recommendations. It is noted that the Agency decided to use “main areas of concern raised in relation to exploration drilling” (p. 9) that neglected to identify how such concerns were determined. For example, were “main areas of concerns” based on criteria of commonality? If so, there is a potential to neglect concerns that may be unique to different perspectives.

Despite the lack of clarity on “areas of main concern”, our review indicates that, overall, the Agency failed to adequately capture KMKNO’s conclusions and recommendations. While some of the identified individual concerns are captured within the document, the Agency did not address concerns for the lack of information needed to improve clarity; misinterpretation of information; gaps in identified mitigation; participation in co-development of monitoring programs; and lastly, improve mitigation measures based on shared values, temporal and adaptive management strategies, and improved coordination with oil and gas operations. A table outlining the specifics of KMKNO’s concerns and recommendations that were not adequately addressed are found in Table 1.

Table 1. Assessment of whether KMKMO's concerns were adequately captured by the Agency.

Conclusion & Recommendations from the EIS Review Conducted by UINR for KMKNO	Assessment of Whether Conclusions and Recommendations were Adequately Captured (or not) by the Agency
1. Require additional information to improve clarity • include additional information requests • improve clarity of the document by including summary statements from the original Flemish Pass EIS • improve clarity of the presented ecological information based on seasonality of occurrence	Not adequately captured: • The requirement of information to improve clarity as a specific subject matter was not included in Appendix C. • It is unknown whether additional information was provided in the final abridged EIS, however, given the lack of temporal management strategies employed in the conditions, it was unlikely that the material was incorporated to the satisfaction of KMKNO.
2. Address misinterpretation of information • correct statements that are misleading and those that may be perceived as harmful to the reputation of the Mi'kmaq • Improve transparency in the communication of potential impacts from the supporting material • support statements with references	Not adequately captured: • The misinterpretation of information as a specific subject matter was not included in Appendix C. • It is unknown whether misinterpretation of information was corrected in the final abridged EIS. • Without transparency in information on potential impacts, proposed mitigation is inadequate
3. Address gaps in identified mitigation • additional impacts identified by the reviewers requires mitigation or justification • review of Proponent's operation plans for consistency in mitigative strategies	Not adequately captured: • Gaps in identified mitigation as a specific subject matter was not included in Appendix C or within the comment/concern in the subject matter. • Included opportunity to comment on Proponent's Spill Response Plan, however, opportunities for review of other plans such as the well and wellhead abandonment plan (Condition 5.2) or ice management plan (Condition 6.4) are not identified.
4. **Expand participation of Indigenous peoples in the co-development of monitoring rather than processes for only sharing information**	Not adequately addressed: Limited opportunities exist for co-development of monitoring. Continued recognition of DFO as the both the authority and expert in

	marine aquatic resources leaves little room for Indigenous participation as sovereign nations and as expert as Indigenous knowledge holders. Co-development of the monitoring plans offer an opportunity to incorporate Indigenous knowledge as a result of inclusion and meaningful participation in plan development. Opportunities exist in the review and possible incorporation of a spill response plan (Condition 6.7). Other potential opportunities for co-development of monitoring exist in: • marine mammal monitoring plans (Condition 3.9) • potential research initiatives for Atlantic salmon (Condition 3.13) • sensitive benthic habitat (Condition 3.12.2) • underwater sound levels (Condition 3.12.3) • migratory bird interactions with lighting (Condition 4.4.4) • well head abandonment plan (Condition 5.2) • physical environment monitoring program (Condition 6.2) • ice management plan (Condition 6.4) • well control strategies (Condition 6.5) • mitigation options when proponent activities cannot be relocated and consultation is needed to reduce risk to sensitive features (Appendix A, bullet 4) • environmental effects monitoring (Condition 6.10) • spill impact mitigation assessment (Condition 6.11), and • record keeping considered to be appropriate to demonstrate compliance (Condition 8.1).
5. **Improve mitigation measures based on shared values, incorporation of temporal and adaptive management strategies, and improved coordination with the adjacent oil and gas operations** • use of the Proponent's Precautionary Principle as justification to address scientific unknowns • adopt temporal management strategies given the proximity to ecologically significant areas and evidence of Atlantic salmon in the region	Not adequately addressed: • The Agency does not make reference to the integrity of the Proponent's Precautionary Principle to address scientific unknowns and presented conflicting information by having low impacts identified by DFO yet have knowledge gaps addressed with the ESRF research project • Temporal management strategies are not recommended with the primary focus is through mitigation and not prevention, a key Mi'kmaq value in resource management

• adopt adaptive management strategies given the proximity to ecologically significant areas and evidence of Atlantic salmon in the region, and • prohibit substances (dispersants) given the proximity to ecologically significant areas and evidence of Atlantic salmon in the region.	• Adaptive management strategies are adopted for corals and do not include the strategies to protect the socio-cultural values of Indigenous peoples (Condition 3.7) or coordination with oil and gas industry to mitigate cumulative effects of multiple operations operating concurrently • Dispersants are not prohibited based on proximity to ecologically significant areas or salmon presence in the region (Condition 3.2)

3.2 Does the Agency's response adequately address KMKNO's concerns and recommendations specific to Atlantic salmon and American eel?

It is the opinion of this review that the Agency's response does not adequately address KMKNO's concerns and recommendations specific to Atlantic salmon and American eel. The Agency states on page 2 of the Draft Environmental Assessment Report that it "used various sources of information in conducting its analysis," including "advice from expert departments and agencies" such as DFO. Much of the advice provided by DFO states that there is uncertainty regarding the at-sea migration patterns and habitat use of Atlantic salmon or that oceanic movements are not well understood. Furthermore, DFO relied on "few marine surveys" to justify their conclusion that the project's mitigation measures, monitoring and follow-up programs would adequately address potential effects on fish and fish habitat. The uncertainty or lack of information available on fish species, especially important culturally significant species such as Atlantic salmon and American eel in the project area does not indicate that they are not in the area and will not be affected by the project.

The Agency addressed knowledge gaps regarding Atlantic salmon migration and notes that there are calls for proposals for environmental and social studies related to Atlantic salmon. However, the Agency does not refer to or suggest any future studies for American eel which was recommended by Indigenous groups, including KMKNO. Additional information on avoidance and mitigation measures for the American eel is still required.

3.3 Opportunities for Two Eyed Seeing in Current Processes

Opportunities exist for the incorporation of Two Eyed Seeing in the Environmental Assessment process and subsequent conditions and guidelines. As noted in section 2.2.3, Two Eyed Seeing is the integration of Mi'kmaq and Western values and was reflected in the recommendations developed by UINR and KMKNO. Specifically, Mi'kmaq values of relationships to culturally significant species that may be mitigated through preventing harm and waste, protection of water quality and habitats, and acting conservatively. Clearly, there are opportunities identified to incorporate Indigenous Knowledge, thus Two Eyed Seeing, in the co-development of monitoring plans as noted in Table 1. However, there are additional opportunities for Two Eyed Seeing. The following recommendations identifies where Two Eyed Seeing could be incorporated "for the benefit of all" for the potential conditions established under the *Canadian Environmental Assessment Act* (2012) and the standards and guidelines used by the Offshore Oil and Gas Industry.

3.3.1 Conditions

Overall, there are no attempts to integrate temporal management strategies that are viewed as key to preventing harm and waste as a key Mi'kmaq value. The following identifies where and how Two Eyed Seeing could be incorporated.

- Condition 2.10: Only notification is required when documents are submitted online for monitoring plans and assessments. Key opportunities for Two Eyed Seeing could be in the co-development of plans and assessments. This was addressed in Table 1.

- Condition 3.3 Could expand to prohibit higher toxicity chemical in the special areas and define those areas within the conditions thereby preventing excessive contamination by preventing use of certain substances.

- Conditions 3.11 Expand report of collisions to contributing funds to Marine Animal Response Society (MARS) or similar organization as reciprocity.

- Condition 5.2 refers to inclusion of "potentially affected Indigenous groups when fishing licences overlap with the Designated Project Area" in a wellhead abandonment strategy neglects potential impacts to the Aboriginal and Treaty rights protected in s.35 of the *Constitution Act* as it only focuses on impacts to license holders.

- Condition 6.7.4 Expand measures for wildlife response, protection and rehabilitation, etc to contributing funds to Marine Animal Response Society (MARS) or similar organization.

- Condition 6.10.2 Include Indigenous peoples in the co-development of testing Indigenous identified traditional foods that coincides with consumption patterns.

- Condition 6.16 Proponent's report of the effectiveness of the operating procedures and cessation of work activities due to inclement weather and sea conditions could be used as evidence to improve future operations, standards, and regulatory changes for the industry.

3.3.2 Industry Standards and Guidelines

Industry standards and guidelines serve to support and complement the regulations they enforce. However, as stated in the *Offshore Waste Treatment Guidelines*, it is important to note that guidelines are not statutory instruments and it is not mandatory for an operator to follow the means or methods described in the guidelines. As previously stated, the concept of preventing harm to Mother Earth is a key Mi'kmaq value and many industry guidelines have similar values. Opportunities to incorporate Two-Eyed Seeing in guidelines are described as follows:

- Offshore Waste Treatment Guidelines
    - Continue to strive to minimize the concentrations and volumes of waste materials discharged to the environment. Performance target goal should be 0 mg/L of discharged waste or water.

- December 2010 is the current version. Recommend review and update to reflect new information and evolving technology and to include Indigenous groups in review.

- Offshore Chemical Selection Guidelines for Drilling & Production Activities on Frontier Lands
  - April 2009 is the current version. Recommend review and update guidelines regularly to reflect new information and evolving technology. Include Indigenous stakeholders in review and update process.
  - Modify selection criteria to only allow chemicals from the PLONOR (Pose little or no risk to the environment) List.

- Drilling and Production Guidelines
  - Recommend F=future revisions to include Indigenous perspectives and allow for incorporation of Two-Eyed Seeing. Indigenous knowledge may propose an alternative method that provides an equivalent or better means of compliance of regulations.

- Offshore Physical Environmental Guidelines
  - "The present edition was developed through a consultative process including representation from Industry, government departments, consultants, and the International Ice Patrol (IIP)." The inclusion of Indigenous groups in the consultative process is not clear.
  - September 2008 is the current version. Recommend review and update guidelines, including Indigenous groups in process.

3.4 Other Concerns & Areas of Interest

Other items of concern were noted. Specifically:

- Section 3 The title should include Impacts on Special Areas as sea corals and sponges are not fish. Suggest changes to title "Fish, Fish Habitat and Special Areas Potentially Impacted."

- Condition 3.3 should include "and biodegradable and environmentally-friendly alternatives within muds and cements" as noted in Appendix A, p. 86)

- Conditions state that a change in location of the anchor(s) or well or redirect drill cutting discharges to avoid affecting the aggregations "unless not technically feasible" and requires consultation with the Board and DFO (Condition 3.7). Thus, protection of corals or other sensitive features may not be protected.

- Conditions require the Proponent to implement a variety of measures to "avoid harming, killing, or disturbing migratory birds" (Condition 4.1 to 4.5) but do not extend

to marine life. Similar strategies, policies, or proponent principles for protecting aquatic life is expected.

4.0 Conclusion

Based on the results of this review, we conclude that despite the potential to impact Nova Scotia Mi'kmaq culture and rights from the Central Ridge Exploration Drilling Project the Agency's predetermination of low impact and thus low depth of consultation impeded the level of Indigenous Knowledge required. As such, this determination further limited the opportunities to incorporate concerns and recommendations based on Indigenous knowledge in the conditions.

It is noted that KMKNO's conclusions and recommendations were not adequately captured in Appendix C. Regarding the Agency's response in addressing KMKNO's concerns and recommendations specific to Atlantic salmon and American eel, a lack of Western Scientific information and uncertainty in existing literature does not dismiss the possibility of increased pressures in already struggling species populations. Incorporating IKS can help fill gaps in Western knowledge, especially when it comes to species of significant importance to Indigenous peoples like Atlantic salmon and American eel.

Understandably, the incorporation of Indigenous knowledge and the use of Two Eyed Seeing in the oil and gas industry is new and there are challenges associated with understanding Indigenous knowledge systems and how it can be incorporated "for the benefit of all." Through this review, we have identified several areas where IKS, and thus the use of Two Eyed Seeing, can be incorporated. Specifically, in

- the conditions issued under the *Canadian Environmental Assessment Act*;
- the co-development of monitoring and assessment plans and testing of traditional foods;
- expanding the principles for the protection of migratory birds to marine life;
- adapting operational plans, guidelines, and regulations based on experience;
- updating of industry standards and guidelines; and
- initiating in forms of reciprocity where the proponent gives back for what is taken or lost such as in contributing to charitable organizations that assist in response and recovery of marine animals.

Other concerns noted were omission of text stated in Appendix A in the proposed conditions, lack of priority for protecting benthic species if technically unfeasible to do so, and emphasis on protection of migratory birds rather than culturally important species.

5.0 Literature Cited

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