REGIONAL ASSESSMENT OF OFFSHORE OIL AND GAS EXPLORATORY DRILLING EAST OF NEWFOUNDLAND AND LABRADOR

Technical Advisory Group (TAG) Session on Cumulative Effects September 13, 2019 QUESTIONS AND ITEMS FOR DISCUSSION PARTICIPANT INPUT FORM

1) Possible sources of cumulative effects

- a) How should the inherently dynamic nature of the marine environment, including the continued influence of climate change and other such factors, be considered and addressed in the RA?
- Because it remains unclear what species lists and what explicit monitoring protocols will be used to determine potential impacts of exploratory drilling and given that very few peer reviewed papers exist on impacts of oil and gas activities in the area considered in this study, measurement of cumulative impacts remains uncertain.
- Data presented in the IPCC SCOCC report should be considered as part of cumulative effects of climate change on the marine environment, and given the expected temperature increase trajectories, as well as the low level of several commercially fished populations, any additive impacts of exploratory drilling must be considered in this context.
- b) What type and level of future exploratory drilling should be assumed in the Study Area for the purposes of the cumulative effects assessment, and how should this be defined and approached (e.g., possibly through definition of various "scenarios" of future activity levels / intensities / distributions upon which to base the assessment)?
- Proximity of exploratory wells, including the establishment of biologically meaningful buffer zones around areas where sensitive species (corals and sponges) are known to occur should be considered.
- c) What other types of human activities are affecting the marine environment in the Study Area, and are likely to have the most potential to result in cumulative effects in combination with offshore exploratory drilling?
- Commercial fishing activity, seismic activity, oil spills and climate change impacts are the most prevalent human activities in the Study Area.
- Where there are high levels of commercial fishing activity, impacts of exploratory wells should be considered as having additive cumulative impacts.
- Given the three spill incidents in 2019, the relative probability of spills has increased and impacts on wildlife sensitive to these spills is necessarily greater and potentially cumulative (i.e. seabirds).
- We have made several suggestions in our climate change submission on impacts of climate change both to the
 exploratory drilling processes as well as a result of exploratory drilling or extraction resulting from exploratory
 drilling.

2) Potential cumulative effects and their management

- a) What factors and processes influence whether (and to what degree) the effects of individual projects and activities in the Study Area may overlap or otherwise interact to result in cumulative effects?
- b) Are there particular environmental effects that are more likely than others to behave "cumulatively" in the Study Area? Are there certain environmental components that are more likely to be affected or are more sensitive to such cumulative effects?
- Sensitive seafloor species such as corals and sponges have a low threshold for increased sedimentation. As such any of these species impacted by sediment disturbance, release of drilling muds likely do not survive over the long term. Areas where these species are known to occur in large concentrations should be avoided for all exploratory drilling activity. There are existing polygons identified within Canada's EEZ and in areas beyond

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national jurisdiction that should be avoided.

- It must be noted that the current monitoring protocol does not use a species list for corals or sponges relevant to Canada and as such past data collected on exploratory drilling may not be of use.
- c) Are there existing regulatory, planning or other mechanisms that help to ensure an adequate "degree of separation" between individual activities and their environmental effects in the Study Area?
- Given that Canada and NAFO have identified areas where bottom fishing is prohibited (and where it has in the past taken place so closed areas are in fact in the process of recovering)
- d) What recommendations could the Committee consider making in its report around how cumulative effects might be better managed through existing, enhanced or potentially new regulatory and planning processes?
- A proper monitoring framework that includes all human induced activities and overall impacts and synergistic
 effects should be in place. All monitoring data and information should be made public and regularly updated on
 the GIS platform.

3) Do you have any other input or recommendations that you would like to provide to the Committee on this topic?

- Cumulative effects and impacts may be the single most difficult aspect of managing and mitigating impacts of industrial activities and is made more difficult in this case because of the transboundary nature of the RA and the study area, where Canada does not have jurisdiction over activities above the seabed and outside the 200 mile limit.
- The CNLOPB needs to do a much better job of ensuring that studies and research on impacts are peer reviewed and published and that monitoring protocols meet global standards. Where Canada lacks expertise on cumulative impacts of industrial activities on the marine environment, efforts should be made to seek expertise outside of Canada. For example much can be learned from science that has been completed in the Gulf of Mexico and the North Sea where there are ongoing offshore exploratory drilling and extraction activities.
- Climate change has exacerbated impacts of place based human activities on the marine environment, and as such, a holistic view of cumulative impacts across all aspects of oil and gas exploration, other human activities as well as climate change vulnerability of species present in the Study Area should be considered.
- Efforts to reduce cumulative impacts should include area based management tools, where oil and gas activities
 are prohibited.

All comments received will be considered public and may be posted to the Canadian Impact Assessment Registry. For more information on the Canadian Impact Assessment Registry Terms of Use and Submission Policy, please consult https://iaac-aeic.gc.ca/050/evaluations/introduction?culture=en-CA#innovation. For more information on the Agency's privacy policies, consult the Protection?culture=en-CA