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Impact Assessment Agency of Canada
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St. John's, NL, A1C 6M1

Re: Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador - Draft Report

This letter is submitted on behalf of the Ecology Action Centre (EAC), a Halifax-based environmental charity working since 1971 at the local, provincial, national and international level to build a healthier and more sustainable world. EAC's vision is a society that respects and protects nature and provides environmentally and economically sustainable solutions for its citizens. The authors of this submission are subject matter experts in maritime law and marine ecology. We submit this statement as our response to the Impact Assessment Agency of Canada's Draft Report on the Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador (RA), which was made public on Jan. 22nd, 2020.

OUR POSITION

While we respect the immensity of the task that was assigned to the RA Committee in a very short time frame, we find the Draft Report deeply flawed and incomplete, and therefore unsuitable to form the basis of any regulation or Ministerial decision that would exempt future exploratory oil and gas projects in the RA study area from federal impact assessment. Below, we summarize some of the key shortcomings of the RA process and the Draft Report, many of which we have noted previously. First, however, we feel that it is important to identify the broader marine and environmental context within which this assessment is taking place due to the impactful and precedent-setting nature of the RA.

MARINE AND ENVIRONMENTAL CONTEXT

According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), ecosystems across most of the globe are now significantly altered by multiple human stressors, with the majority of biodiversity and ecosystem functioning indicators showing rapid decline. Approximately 25 percent of species in assessed animal and plant groups are threatened and may face extinction if the drivers of biodiversity loss cannot be mitigated¹. In the marine environment, sixty-six percent of the ocean area is experiencing increasing cumulative impacts¹. As recently highlighted by the Intergovernmental Panel on

¹ Díaz, S., Settele, J., Brondízio, E., Ngo, H., & Guèze, M. Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.



Climate Change (IPCC) Special Report on the Oceans and Cryosphere in a Changing Climate, climate change is the most pervasive stressor in the oceans, with anthropogenic greenhouse gas emissions driving global ocean warming, acidification, de-oxygenation and sea level rise. Human activities such as land- and sea-based pollution, overexploitation of harvested species, and coastal development combine with the effects of climate change, and each other, to further degrade biodiversity and ecosystems^{1,2}. In Atlantic Canada, Fisheries and Oceans Canada reports that one quarter of commercial fish stocks are below healthy population levels³. Furthermore, the northwest Atlantic Ocean is warming more rapidly than the global average, meaning that fisheries and ecosystems in this region will experience unprecedented change in coming years.⁴

The degraded state of the oceans, both globally and in Atlantic Canada, is the result of many decades of short-sighted decision-making in which we have failed to rigorously evaluate human activities in the broader context of marine environmental health and effectively avoid or mitigate adverse effects, particularly long-term cumulative effects. The best available and most current science is telling us loudly and clearly that this approach to doing business is no longer viable.

The United Nations Sustainable Development Goals, to which Canada is a signatory, makes ocean conservation a priority. Sustainable Development Goal 14 (Life Below Water) mandates the conservation and sustainable use of the oceans, seas and marine resources for sustainable development. Fish stocks must be maintained at a biologically sustainable level. It is imperative that we prioritize building resilience back into our oceans to support human well-being - including the sustainable industries that depend on healthy marine ecosystems - and mitigate the effects of climate change². As Hans-Otto Pörtner, Co-Chair of IPCC Working Group II, stated: “Reducing other pressures such as pollution will further help marine life deal with changes in their environment, while enabling a more resilient ocean.”

Within this context, we find the RA process and Draft Report unacceptable and at risk of setting a precedent that will lead to further degradation of our marine biodiversity and climate. We have participated in the RA process in good faith and are discouraged to see that very little of our feedback has been incorporated into the Draft Report. Not only do we find the Draft Report insufficient as the basis for drafting regulations, we also note that it also breaches the Terms of Reference (ToR) of the Agreement, which states:

4.16. “The Committee will conduct the Regional Assessment in a manner that discharges the requirements set out in CEAA 2012 and satisfies the requirements set out in the Factors to be considered in the Regional Assessment and Terms of Reference attached as Appendices A and D to this Agreement”.

As we will demonstrate as we summarize our key concerns, the Draft Report does not meet the threshold of discharging the requirements of CEAA 2012.

KEY CONCERNS

² IPCC, 2019: Summary for Policymakers. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate [H.O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, M. Nicolai, A. Okem, J. Petzold, B. Rama, N. Weyer (eds.)].

³<https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/status-major-fish-stocks.html>

⁴ Vincent S. Saba, Stephen M. Griffies, Whit G. Anderson, Michael Winton, Michael A. Alexander, Thomas L. Delworth, Jonathan A. Hare, Matthew J. Harrison, Anthony Rosati, Gabriel A. Vecchi, Rong Zhang. Enhanced warming of the northwest Atlantic Ocean under climate change. *Journal of Geophysical Research: Oceans*, 2015; DOI: 10.1002/2015JC011346

1. The report recognizes the sensitivity of corals and sponges to exploratory drilling but does not recommend exclusion zones to protect them.

In the early section on Environmental Setting, the Draft Report explicitly states:

3.2.1.3 “Deep-sea corals and sponges are of particular interest and concern, particularly due to their important ecological roles as complex habitat for a variety of marine species. These animals are particularly sensitive to the effects of offshore exploratory drilling and other anthropogenic stressors”.

However, despite making this clear statement, the Committee fails to enact the precautionary principle, which is mandated in the ToR, and recommend exclusion zones for oil and gas based on existing, scientifically identified sensitive or protected areas (e.g., Marine Refuges, Ecologically and Biologically Significant Areas [EBSAs], Sensitive Benthic Areas [SiBAs], Vulnerable Marine Ecosystems [VMEs]).

Instead, the Committee writes:

4.6.2 “No federal or provincial government department or agency has established or proposed particular areas or times which should be excluded from future exploratory drilling activities in the Study Area”.

As the Committee knows, the scientific work to identify and establish areas for coral and sponge conservation has been completed by domestic and international scientific and management bodies (DFO and NAFO, respectively). In fact, NAFO, in their submission to the Strategic Environmental Assessment in 2014, gave specific recommendations that the VMEs that have been closed to fishing activity should also be closed for oil and gas exploration.⁵ Yet, the Committee has argued that there is no scientific evidence given for closure. This is simply not the case.

Acknowledging the existence of sensitive and protected areas in the Final Report is not enough. The Committee needs to go a step further and recommend exclusion zones based on some of these designations. At the very least, the Committee must recommend that no exploratory drilling occur within DFO Marine Refuges or NAFO Fishery Closures.

It is also essential that the Committee be given time to see the recommendations arising from the Canadian Science Advisory Secretariat (CSAS) process regarding the impacts of oil and gas drilling on benthic species. While the Committee has recommended that the RA be updated at the conclusion of this process, given the importance of coral and sponge conservation in the Study Area, the recommendations of the Final Report, as well as any regulations based on them, should be delayed until this CSAS report is available.

Furthermore, it is highly problematic, in our view, when the Committee states that “regulatory authorities did not support exclusion recommendations at this time” (4.6.2). The Committee has both the authority and responsibility to make independent recommendations based on the best available science, which clearly indicates the sensitivity of coral and sponge habitats, in particular, to disturbance associated with oil and gas exploration and has led to the designation of a variety of sensitive and protected areas (as the Committee itself acknowledges [3.2.1.3]).

⁵ NAFO, Submission of NAFO response to the C-NLOPB SEA draft report, 16 April 2014, GFS/14-135

Lastly on the topic of protected areas, the Committee states:

4.6.2 “Other interests have suggested establishing exclusion zones in the Study Area but have not provided a supporting scientific basis for their identification”.

It is unclear what suggestions, specifically, the Committee is referring to here. We, along with several other organizations, have repeatedly recommended exclusion zones based on previously conducted scientific processes, as described above. We note that the fishing industry has also recommended exclusion of oil and gas exploration from areas that are important to fish populations. We support this recommendation and urge the Committee to remain open to future submissions of research and recommendations on this issue.

2. The Draft Report does not adequately consider the impacts of offshore oil and gas activity on climate change.

The preamble to CEAA 2012 states:

“Whereas the Government of Canada recognizes that impact assessment contributes to Canada’s ability to meet its environmental obligations and its commitments in respect of climate change;

And whereas the Government of Canada recognizes the importance of regional assessments in understanding the effects of existing or future physical activities and the importance of strategic assessments in assessing federal policies, plans or programs that are relevant to conducting impact assessments;”

While the Committee included both upstream and downstream employment and socioeconomic benefits of offshore oil and gas activity in its assessment, it neglected to do so for the negative impacts of oil and gas activity on climate change. This contradiction is deeply troubling and unacceptable.

For example, the Committee states:

7.1.2.1 “... offshore petroleum related expenditures (including exploration, pre-development, development and production activities) have totalled nearly \$63 billion, including over \$9 billion in exploration spending during that period.”

7.1.2.1 “... substantial portion of the local benefits from the offshore petroleum industry activity accrues to companies providing goods and services to oil companies as well.”

7.1.2.1 “Should exploratory drilling activities be successful in identifying important and commercially viable petroleum resources in the region, they can also lead to additional economic activity in Newfoundland and Labrador and elsewhere related to further exploration, and possibly, petroleum production activities. An important potential outcome of such exploration may also therefore be future development and growth in the province’s offshore oil and gas sector and overall economy and broader benefits to Canada as a whole.”

However, the Committee minimizes or flatly ignores downstream analyses when dealing with emissions, climate change and the environment:

7.2.2 “Exploration is the first phase of the petroleum development cycle, and there are thus no upstream activities and therefore, no upstream emissions. Downstream emissions would occur only after oil is discovered, confirmed to be of sufficient quantity and quality to constitute a commercial discovery, and leading to a subsequent oilfield production project being proposed, approved and implemented.”

7.2.3 “Without a full analysis of all emitting sectors and their expected contributions for the target years, it is not possible to say precisely what the contribution of these emissions from exploratory drilling in the Study Area would be, nor their implications for Canada meeting its emission targets. Given the small portion of total emissions it would generate, it is considered unlikely that exploratory (and delineation) drilling itself would hinder Canada’s ability to meet its emissions targets. The Committee has therefore not made a specific recommendation on this particular issue.”

Essentially, the Committee is saying that the long-term economic benefits of oil and gas downstream of exploration are real and can be quantified but the costs related to climate change cannot. We reiterate our concern, which we have expressed repeatedly throughout the RA process, that not considering the downstream impacts of potential extraction scenarios on climate change is unacceptable. At the very least, the RA should include a climate test of potential future drilling scenarios. Furthermore, the RA Agreement requires consideration of the extent to which offshore exploratory drilling contributes to sustainability. By definition, sustainability must include climate change. This is a critical failure by the Committee and represents another breach of the ToR.

According to the RA, the average annual GHG emissions per exploration well are 52,641 tonnes CO₂e (Table 7.2, page 176). According to Chevron, however, the average annual GHG emissions resulting from an exploration well could range from 0 to approximately 124,349 tonnes CO₂e per year, plus an additional 26,000 tonnes CO₂e that may result from the combustion of produced oil and the flaring of produced gas, and about 41,450 tonnes CO₂e associated with operational drilling, vessel traffic, and helicopter traffic.⁶ Flaring, vessel traffic and helicopter emissions were ignored in the Draft Report. GHG calculations for offshore NL are based on the ECCC averages and the following table from a Nunami Stantec report that was prepared for the Baffin Bay-Davis Strait SEA in 2019.

Table 7.4 GHG Emissions—from Offshore Oil and Gas Activities

sources	GHGs Reported to ECCC GHGRP for 2016 (tonnes /year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ eq
Hibernia	517,524	1,613	15.5	562,463
Terra Nova	527,836	902	34.3	560,600
Sea Rose	401,696	1,307	38.6	445,861
Average	482,352	1,274	29	522,975

SOURCE: (ECCC GHGRP 2018)

The government of Newfoundland and Labrador has a soft target of 30% below 2005 levels by 2030 or 6.9 Mt. Further, expansion of offshore oil and gas in Newfoundland would make it very difficult for Canada to meet its

⁶ AMEC/Chevron, West Flemish Pass Exploration Drilling Project Final Report, File No: 121415690 January 2020, page 2.25

international targets. We agree that the targets are beyond the scope of the RA mandate, however, the calculations are well within its purview, and the ToR make accurate calculations and analysis mandatory.

3. The RA lacks a substantive analysis of cumulative effects.

As noted by the Committee, part of the rationale for an RA approach was its ability to deal with cumulative effects more effectively than Strategic or project-specific assessments (Draft Report, Section 5). However, the Committee has failed to produce a substantive cumulative effects analysis in the Draft Report. This represents a breach of the ToR, which state:

“The Regional Assessment of offshore oil and gas exploratory drilling east of Newfoundland and Labrador will be conducted so that it satisfies the requirements of CEAA 2012, (s. 22(1) of the IAA) and will include a consideration of the following factors:

- the changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes that are likely to be caused by offshore exploratory drilling, including
 - the effects of malfunctions or accidents that may occur in connection with exploratory drilling,
 - any cumulative effects that are likely to result from offshore exploratory drilling in combination with other physical activities that have been or will be carried out, and the result of any interaction between those effects”

In the preamble to Section 5, the Committee notes the definition of cumulative effects:

5. “A cumulative effects assessment involves attempting to understand and address the overall (total) effects to a component or system resulting from all relevant past, present and reasonably foreseeable activities and other sources of perturbation and change in a region.”

Yet, when it comes to cumulative effects assessment involving future oil and gas development in the RA Study Area, no attempt at a quantitative assessment is made. Instead, the Committee states:

1.3.1 “... although future exploratory drilling in the Study Area may lead to further petroleum discoveries, and thus to possible future oil and gas development activities in the region, the potential for and specific characteristics of any such development would depend on the type and quantity of any hydrocarbons found, the location, area, depth and other characteristics of these reserves, and other factors.”

1.3.1 “Therefore, any potential future development activities are not and cannot be defined, described or assessed in any degree of detail at this early stage, and so these are not included within the scope of the Regional Assessment.”

It is understandable that it is not possible to accurately predict all future oil and gas development at this time. However, the exploratory drilling scenarios presented in the GIS platform should at least provide the basis for forecasting reasonable extraction scenarios and conducting a cumulative effects assessment based on an intensity of extraction derived from past experience. It is not good enough to neglect downstream drilling activities, and their potential interactions with other stressors, because they are challenging to predict. As noted

above, this was in fact part of the ToR for this RA and, as shown below, oil companies have been counting on a cumulative effects analysis being conducted in this assessment.

This issue raises the larger point that the Draft Report does not, in fact, include much in the way of an actual, quantitative assessment. Instead, the focus seems to have been on data gathering and the development of a GIS for visualizing spatial data layers. This is a useful goal and no small task. However, it is not adequate to form the basis of any regulation regarding impact assessment requirements for future exploratory projects.

The Committee itself states:

8.4 “In this case the Committee had neither the time nor the capacity to evaluate cumulative effects in a predictive / quantitative sense, but rather the focus of the assessment was from a planning perspective with the outcome being a suggested mechanism by which cumulative effects might best be managed.”

This is unacceptable. It suggests that this RA is administratively and activity focused as opposed to being environmentally defined. We maintain our position that the Committee must shift its focus and be given more time to fulfill the ToR, including a substantive cumulative effects analysis, in order to achieve the intended outcomes of the RA.

A complete review of all the potential areas where a cumulative effects analysis is lacking is beyond the scope of this submission. However, we will focus briefly on two additional areas: seismic and oil spills.

A recent report noted major gaps and uncertainties in the cumulative effects of anthropogenic sound, spatial and temporal separation distances, noise, having multiple seismic surveys in a small area, pre-clearance zones, the efficacy of mitigation measures, far field sublethal impacts, effects near ice-covered waters, and potential impacts from the use of alternative geotechnical surveying equipment other than compressed air sources.⁷ This report was released in February 2020, again showing the need for this RA to slow down and wait for science to inform the assessment.

Additionally related to cumulative effects, the report makes no mention of the many oil spills that have resulted from development offshore of Newfoundland. Some notable examples that were in the media include:

- The Terra Nova oil spill - protected from scrutiny.⁸
- Terra Nova oil production suspended over fire safety equipment failure⁹
- Biologist fears extent of bird mortality may grow after N.L. oil spill¹⁰
- Largest oil spill in N.L. history raises new questions about province’s fast-growing oil industry¹¹
- 12,000 L of oil spilled into ocean off Newfoundland, causing oil rig shutdown¹²
- Remainder of oil spill off N.L. coast won't be cleaned up¹³

⁷ DFO, Review of the Statement of Canadian Practice with Respect to the Mitigation of Seismic Sounds in the Marine Environment. Canadian Science Advisory Secretariat Advisory Report 2020/005, February 2020 at 9, 11.

⁸ <http://www.mun.ca/serg/acvern/TerraNova.html>

⁹ <https://www.timescolonist.com/terra-nova-oil-production-suspended-over-fire-safety-equipment-failure-1.24040183>

¹⁰ <https://nationalpost.com/pmnn/news-pmnn/canada-news-pmnn/biologist-fears-extent-of-bird-mortality-may-grow-after-n-l-oil-spill>

¹¹ <https://globalnews.ca/news/4767775/newfoundland-questions-oil-spill/>

¹² <https://www.cbc.ca/news/canada/newfoundland-labrador/hibernia-oil-spill-production-stopped-1.5216108>

¹³ <https://www.ctvnews.ca/canada/remainder-of-oil-spill-off-n-l-coast-won-t-be-cleaned-up-1.4533779>

- Newfoundland's largest-ever oil spill is now impossible to clean up¹⁴
- Oil spills leave regulator unhappy with performance of N.L.'s offshore industry¹⁵

Oil pollution resulting from day-to-day activities contributes more oil to marine ecosystems than do shipping accidents.¹⁶ These small-scale oil discharges (i.e., chronic oil pollution) almost never trigger a formal response in Canada or elsewhere (e.g., in terms of cleanup and mitigation), primarily because they are small and occur frequently over extensive and remote areas.¹⁶ Thus, overall, Section 4.3 (Unplanned Events, Module 8 of GIS), is inadequate. Chronic oil pollution should be part of a cumulative effects assessment.

There is no shortage of literature or frameworks available to guide a meaningful cumulative effects analysis.¹⁷ The importance of this section, and its shortcomings, is highlighted by the fact that other project-based environmental assessments are relying on this RA. For example, the West Flemish Pass Exploration Drilling Project EIS Summary states:

Cumulative Effects:

- There is a perceived lack of a comprehensive approach to analyzing, understanding and addressing the potential for cumulative impacts of so many proposed projects in the region on the environment, and on Indigenous rights. It is anticipated that the current Regional Assessment underway in Atlantic Canada will attempt to address cumulative effects on a broader level."

Action/Mitigation:

- Chevron is participating in the Regional Assessment where a more regional and multi-faceted approach is being taken to examining cumulative effects of multiple projects and interactions with other ocean users. Chevron will apply any applicable new learnings from the regional assessment to their exploration drilling Project. (Table 4.1, p. 25)¹⁸

Simply put, the RA committee passes the buck on responsibility:

¹⁴ <https://business.financialpost.com/commodities/energy/n-l-s-largest-ever-oil-spill-is-now-impossible-to-clean-up-regulatory-board>

¹⁵ <https://atlantic.ctvnews.ca/oil-spills-leave-regulator-unhappy-with-performance-of-n-l-s-offshore-industry-1.4556079>

¹⁶ Fox, C.H, P.D O'Hara, et al., "A Preliminary Spatial Assessment of Risk: Marine Birds and Chronic Oil Pollution on Canada's Pacific Coast." (2016) 573 *Science of the Total Environment* 799-809; Meng, Qingmin. "The Spatiotemporal Characteristics of Environmental Hazards Caused by Offshore Oil and Gas Operations in the Gulf of Mexico." (2016) 565 *Science of the Total Environment* 663-71; Ellis, Joanne, Sabina Wilhelm, et al., "Mortality of Migratory Birds from Marine Commercial Fisheries and Offshore Oil and Gas Production in Canada." (2013) 8:2 *Avian Conservation and Ecology*; Ellis JI, Fraser G, Russell J (2012) Discharged drilling waste from oil and gas platforms and its effects on benthic communities. *Marine Ecology Progress Series* 456: 285-302; DFO. "Assessment of the Effectiveness of Mitigation Measures in Reducing the Potential Impacts of Oil and Gas Exploration and Production on Areas with Defined Benthic Conservation Objectives" (2019) DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2019/025; Cordes Erik E., Jones Daniel et al., *Environmental Impacts of the Deep-Water Oil and Gas Industry: A Review to Guide Management Strategies* (2016) 4 *Frontiers in Environmental Science*
<https://www.frontiersin.org/article/10.3389/fenvs.2016.00058>;

¹⁷ Peter Duinker, et al., "Scientific Dimensions of Cumulative Effects Assessment: Toward Improvements in Guidance for Practice." *Environmental Reviews* 21.1 (2013): 40-52

¹⁸ Stantec, West Flemish Pass Exploration Drilling Project EIS Summary, Prepared for: Chevron Canada Limited, File No: 121415690, January 2020, online: <https://iaac-aec.gc.ca/050/documents/p80161/133822E.pdf>

5.4 “...government assume responsibility for offshore-related cumulative effects assessment and management through a planning process directed by a dedicated agency.

6.3.1.1 “Planned studies or scientific reviews may inform the management of cumulative effects and which the Committee recommends incorporating into a future update of the Regional Assessment.”

Unfortunately, the RA committee does not recommend anything for the immediate future. A cumulative effects analysis was part of the Committee's mandate and it is unacceptable that this section is lacking. As we argued in the Marine and Environmental Context section of this statement, a business-as-usual approach in which different environmental impacts are considered in isolation of one another is no longer viable. Without a proper cumulative effects analysis, we will always end up underestimating our overall impact on marine ecosystems. As such, the Committee should be redirected and provided the time and resources necessary to fulfill the ToR.

4. The Committee often states that it was unable to obtain necessary scientific studies.

This breaches the terms of the Agreement, which states:

6.1 “The Task Team or the Committee may request federal authorities and provincial authorities having specialized information or knowledge with respect to the Regional Assessment to make that information or knowledge available to the Task team or the Committee in an acceptable manner and within a specified period.”

The Committee clearly has the authority to compel data. If the Committee was unable to obtain this data, then the matter should have been escalated to the Minister(s) involved. The Agreement states:

4.23. “The Committee may request clarification of its Terms of Reference or the Factors to be considered in the Regional Assessment by sending a letter signed by the co-chairpersons to the federal Minister of the Environment, setting out the request. Upon receiving such a request, the federal Minister of the Environment, in collaboration with the federal Minister of Natural Resources and the provincial Ministers, will provide the Committee such clarification in a timely manner.”

The IAA, s. 9(3) allows the Agency, and any person or entity that has been designated with authority to compel information. Moreover, s. 100 of the IAA states:

“Every federal authority that is in possession of specialist or expert information or knowledge with respect to the physical activities in respect of which an assessment referred to in section 92 or 93 is conducted — or with respect to any policy, plan, program or issue in respect of which an assessment referred to in section 95 is conducted — must, on request, make that information or knowledge available to the committee or Agency that conducts the assessment within the specified period.”¹⁹

Therefore, any lack of data is not an acceptable rationale to bypass a proper RA. This attitude impacted report sections on potential damages, oil spills, and analysis of cumulative effects. This RA was mandated by the ToR and CEAA 2012. Thus, the Draft Report should be rejected until the data and scientific studies are incorporated into the results. Again, we recommend that the timeline for the RA be extended to allow key data gaps to be filled, particularly related to cumulative effects.

¹⁹ *Impact Assessment Act*, SC 2019, c. 28, s. 100

5. The Draft Report contains many contradictory statements, particularly relating to the necessity of project-specific EAs once the RA is complete.

One of the stated potential outcomes of the RA is the exemption of future exploratory projects in the Study Area from a project-specific federal EA. However, the Committee also states that many environmental protections arise only as the result of EA conditions, which would not, and will not, exist without a project-specific EA. They then recommend that these conditions continue. This leads to the conclusion that a full project EA should still be required for every application. Furthermore, the RA Committee admits that only through environmental impact statements and project-specific approval by the IAAC could certain environmental protections occur. The Committee lists over 25 items that only exist because of a project-based EA (page 99-100).

We agree with the Committee that the various mitigation and follow-up measures that have been included as conditions of project-specific EA approval for recent exploratory drilling projects in the Study Area under CEAA 2012 be required for all future exploratory drilling projects in the Study Area (4.6.1). We further agree that that the C-NLOPB must continue to ensure that adequate and appropriate modelling is completed or otherwise in place regarding a) drill cuttings and their dispersion, and b) the predicted fate and behaviour of potential petroleum spills. Taken together, the above leads us to the conclusion that, to satisfy the requirements of CEAA 2012 and the new IAA, all the requirements of a project EA are still necessary even in areas where an RA has been completed.

We also agree with the Committee when it makes several recommendations on items to add to an approval. In addition to the aforementioned standard mitigation and follow-up requirements, we agree, for example, with many of the recommendations designed to reduce impacts of oil and gas exploration on seabirds (4.6.1). Such requirements are clearly best served by project EAs, not a one-size-fits-all regulation.

The Committee also appears to contradict itself in their discussion of oil spills, as detailed above. The contradiction lies in the fact that oil spills are the biggest potential risk of oil and gas exploration and exploitation, yet represent perhaps the biggest deficiency in the Draft Report. This alone should cause the report to be rejected.

The Committee also makes contradictory statements on protected areas, as noted earlier in our statement. The idea of requiring IAAC to be notified of the operators' plans to address effects in "special areas" is inadequate. The requirement of providing "evidence" in a submission to the Minister of DFO that risks to biodiversity outcomes are avoided or mitigated, especially "where there is a significant lack of available information" (page 115), also does not provide the level of protection necessary. Existing protected areas identified through previous scientific processes should be respected to ensure they meet their conservation priorities (e.g. protecting corals and sponges).

Fourth, the Committee admits having inadequate data in several sections of the Draft Report and attempts to push this back on to CNLOPB and the relevant authorities:

4.6.2 "CNLOPB specifically consider overall information availability, data gaps and associated environmental risks in future decisions around whether and when to issue licences in these data deficient areas as part of its scheduled land tenure process."

4.6.2 "Study Area (Marine Refuges, Fisheries Closure Areas, Ecologically and Biologically Significant Areas (EBSAs), Sensitive Benthic Areas (SiBAs), Vulnerable Marine Ecosystems (VMEs), it is recommended that the relevant authorities accelerate scientific review and analysis of these areas to

determine if their various components and characteristics warrant additional protection, mitigation or follow-up.”

We do not consider it appropriate to say that there is insufficient data, or that scientific studies were unable to be obtained, and also say conclusively that there is no evidence to support closures. The latter is simply not correct, as we have pointed out. In other sections, the data gaps are too significant for the RA to form the basis of any regulation that would exempt projects in the Study Area from federal EA. Again, we recommend that this RA process be slowed down and the Committee be given the time and resources needed to fulfill their ToR.

6. There is an overemphasis of the GIS in the Draft Report.

The GIS, while useful, is overemphasized in the report. The only provision in the Agreement for software in the RA is:

5.9 “Recognizing the value of a digital, spatially based system to house and make best use of the information generated during the Regional Assessment, the Committee will also provide its advice on the feasibility of and how best to develop and structure such a system.”

Nowhere did it say the GIS would be the best solution, nor did it say that the GIS must be developed. The GIS support tool is currently only partially available and, as such, its usefulness is extremely limited. There was no public participation or engagement in the procurement process. The RFP and the criteria for selecting the vendor was never made public. Furthermore, since the RA report specifically states that many answers in the assessment are contained in the GIS modules, the Draft Report itself is incomplete. This is especially egregious since cumulative effects are done in the GIS:

1.6 “A description of the various predictive scenarios of possible, future exploration drilling activity in the Study Area used as part of the cumulative effects assessment (Module 15).”

This “Module 15” of the GIS only contains a link to a PDF document on potential future drilling activities and has nothing to do with any cumulative effects assessment. In fact, no analytics are possible with the GIS at this stage. The Committee states:

“The associated GIS decision-support tool, be considered by the C-NLOPB in its future decisions as part of the scheduled land tenure process. This should include consideration of potential cumulative effects and their management (as required) through associated planning (licencing) decisions linked to the scheduled land tenure process, in consultation with relevant expert authorities.

The associated GIS decision-support tool and the C-NLOPB’s Strategic Environmental Assessments (SEAs) for Eastern Newfoundland, it is also recommended that the Board seek to utilize this tool as part of any future SEA updates.”

However, calling the GIS a “decision-support tool” is a misnomer given the aforementioned data gaps and deficiencies in the analytical capabilities of this software. Before any regulations are drafted based on this RA, the data must be complete and the analytical capabilities of the GIS system must be upgraded in order to facilitate quantitative analyses, including cumulative effects. Again, this would require additional time and resourcing as well as additional public consultation.

CONCLUSION

The above critiques lead us to two conclusions: 1) the Draft Report fails to meet the ToR of the Agreement and should therefore be considered incomplete, and 2) the Draft Report should not form the basis of any regulation or Ministerial decision that would exempt future exploratory projects from a federal EA. The full requirements of the current EAs, along with the additional recommendations that the RA Committee suggested, are still needed. More data is required in several sections of the Draft Report, and much more analysis is necessary (along with improved analytical capabilities of the GIS). This is particularly true as it pertains to cumulative effects and climate change.

We urge the Committee and its overseeing authority to look at the big picture in order to avoid setting a dangerous precedent that would risk Canada backsliding on its biodiversity and climate commitments. A more holistic approach in line with international biodiversity and climate priorities is urgently needed. For example, the 2011-2020 European Union's Strategic Plan for Biodiversity is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing and conserving the planet's variety of life, and contributing to human well-being, and poverty eradication." This plan states:

"Current negative trends in biodiversity and ecosystems will undermine progress towards 80% of the assessed SDG targets related to poverty, hunger, health, water, cities, climate, oceans and land; whereas Indigenous people and many of the world's poorest communities are projected to be primarily and more severely affected; whereas loss and degradation of biodiversity must therefore be considered not only as environmental issues but also as developmental, economic, social and moral ones;"

As the RA Committee itself states, oil and gas activity has clear negative impacts on marine biodiversity in the Study Area:

5.1.1 "Past and on-going projects and activities have also affected marine fish and fish habitat in the Study Area, and have therefore had implications for the presence and health of these species in the region, including direct effects on fish resources and habitats through commercial fishing activity, as well as the various discharges and other disturbances associated with offshore oil and gas and marine vessel activity throughout the region."

5.1.2 "Past and on-going projects and activities have also affected marine and migratory birds in the Study Area, have therefore had implications for the presence and health of these species in the region, particularly through the artificial lighting, flaring and various marine discharges associated with offshore oil and gas activity and general marine vessel traffic throughout the region. In addition to any local disturbances, migratory bird species may also be affected by a variety of activities and associated effects within their often very extensive ranges, including hunting, pesticides and pollution."

3.2.1.3 "Deep-sea corals and sponges are of particular interest and concern, particularly due to their important ecological roles as complex habitat for a variety of marine species. These animals are particularly sensitive to the effects of offshore exploratory drilling and other anthropogenic stressors."

5.1.4 "Although some types of offshore activities such as exploratory drilling are typically relatively short-term and localized activities and associated disturbances, some environmental disturbances (such as underwater noise) resulting from these activities can be quite extensive, as can other types of marine activities and their associated disturbances (such as seismic programs, marine vessel traffic, and

commercial fishing activity) (Table 5.2). This can increase the potential for such activities to occur within or otherwise affect identified special areas.”

Given these statements, it is clear that much more work needs to be done for this RA to be considered complete and useful for informing regulations. Biodiversity must be taken seriously by the Canadian government. Climate change, including downstream impacts of exploratory drilling, must be fully considered. Cumulative effects require more data and a rigorous analytical framework.

The Committee argues that this report will create more stringent requirements:

8.4 “Their obligations to meet environmental, safety, communications, and economic and social benefits requirements are intended to be more stringent under the anticipated Regional Assessment Regulation than was the case under the former project-specific EA process.”

We certainly hope this to be true. However, this Draft Report offers little assurance that more rigorous standards will be implemented. Throughout this process, the EAC has consistently participated in good faith and has made strong recommendations backed by scientific studies. Our input largely has been ignored. There is now a recommendation that an Oversight Committee be established (4.6.4). However, we are deeply skeptical about this, and the RA process in general, given the lack of consideration of our concerns to date. We do not feel that this is the type of precedent that the government of Canada should be setting in a time of biodiversity and climate crises.

Respectfully submitted,

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In collaboration with Keith MacMaster, Consultant

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PUBLIC PETITION

During the 30-day public comment period for the Draft Report, the EAC ran an online petition that resulted in 2,165 public signatures in support of our concerns. Canadians from across the country are watching attentively. Below is also a short selection of eight comments that we received online along with the public signatures. We have kept the signatories and comments anonymous for the purposes of the public registry. However, if verification is required, we are happy to provide it privately.

Comment #1:

“I am particularly concerned about offshore exploration because of the negative impact the noise of seismic testing has on whales and other marine species [please see references 1-16 listed below]. Did you know that seismic air gun tests can be heard 4000 km away from the test site, and that whales and other species have been modifying their behaviors in attempt to deal with the stress of the chronic noise that they must now endure? Some whales communicate over distances of tens of kilometers, but are now being drowned out by noise and several species have been observed to stop singing for the duration of seismic surveys that can last for months. Marine species vacate areas undergoing seismic surveying and stop feeding. There are inadequate mitigation measures that generally monitor an area of just 500 m around a seismic vessel for marine mammals, but the

noise carries much farther - some studies show that whales within 1-1.2 km of seismic testing are at risk of hearing damage, and they show stress responses at much greater distances. Indeed some seismic testing has caused whale strandings and deaths. It seems terrible to me that this practice is allowed to continue in Canadian waters with such poor regulation, much less expand. In addition to being beautiful creatures, whales may offer substantial climate change offset, with some recent reports suggesting that whales captures more carbon than thousands of trees [17,18]. I strongly encourage the prioritization of whales over oil and gas.

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Comment #2:

“How can we call an area protected if we allow drilling for oil and gas? We protect these areas for a reason, now let’s finish what we started.”

Comment #3:

“The fishery is worth far more than the oil produced from these wells. It is time to turn the page and move on. Our house is on fire and we cannot move.”

Comment #4:

“Please ensure that your policies match your rhetoric of ‘environmental stewardship.’ Although my permanent address code is B4P, I spend half my time on the ocean of NL -- where the threat of oil and gas exploration and extraction is an even more serious situation than here in the Annapolis Valley of NS.”

Comment #5:

“These areas need to be protected. In an increasingly damaged world we need to be guaranteed that the ocean will be protected. It provides our food and oxygen after all.”

Comment #6:

“Please for the sake of our next generation look after our ocean life”

Comment #7:

“These sensitive areas are worth more untouched in the long term”

Comment #8:

“It should go without saying that it is absolutely unacceptable to allow oil and gas drilling in protected marine areas and I would hope that long term climate impacts of drilling projects would be a major consideration in any assessment.”