



**Comments on the
DRAFT ENVIRONMENTAL ASSESSMENT REPORT ON THE NEWFOUNDLAND
ORPHAN BASIN EXPLORATION DRILLING PROJECT**

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By the NunatuKavut Community Council

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INTRODUCTION

The NunatuKavut Community Council (“NCC”) is pleased to present its comments on both the Draft Environmental Assessment Report (“Draft EA Report”) and the Potential Conditions under CEAA 2012 document (“Potential Conditions document”) prepared by IAAC for the Newfoundland Orphan Basin Exploration Drilling Project (“Project”).

NunatuKavut means "Our Ancient Land." It is the territory of the Inuit of NunatuKavut, the Inuit residing primarily in southern and central Labrador. Our people lived in Labrador long before Europeans set foot on North American soil. As it was in times of old, and still today, we are deeply connected to the land, sea and ice that make up NunatuKavut, our home. Today, our people continue to hunt and fish to harvest country food that is important for health and well-being and which connects us to our culture and traditions of the past. Salmon, turrs (Common and Thick-billed murre) and eider ducks (Common eiders) are among the key species that we harvest for these purposes, and which may well be affected by offshore exploratory drilling in the Project area. Additionally, and as is described below, NCC's communal commercial fishery, which harvests in the Project area, plays a central role in the life and economy of NunatuKavut communities.

NCC serves as the representative governing body for more than 6,000 Inuit of south and central Labrador. A council elected by our membership and comprised of members representing each of the six regions of our territory and led by a President and Vice-President governs the NCC, whose primary function is to ensure the land, ice and water rights and titles of its people are recognized and respected. We are also fully present at the grassroots level in our communities, which are many and remote, the vast majority of which are located along Labrador's coast south of Hamilton Inlet.

CONTEXT AND PROCESS ISSUES

As an Indigenous group, a key part of the context for comments natural resource projects relates to new developments in our relationship with the Government of Canada. On September 4, 2019 the Government of Canada signed a *Memorandum of Understanding* (MOU) on self-determination with NCC, representing a significant step forward in our relationship with Canada on the recognition of our Inuit rights and self-determination. Through the MOU, NCC looks forward to finding shared and balanced solutions to a wide variety of issues – including impact assessments, regional assessments and strategic environmental assessments – that advance reconciliation in a way that respects the interests of the people of NunatuKavut and all Canadians. The MOU, which represents the culmination of formal talks that began in July 2018, further heightens our interest in Nation-to-Nation dealings with Canada in relation to Canada's impact assessment regime and the regional assessment of offshore oil and gas development. As the traditional stewards and guardians of our territory of NunatuKavut, our people are in the best position to provide relevant knowledge, and to make decisions, monitor and enforce protections with respect to projects that may affect the natural resources on which we depend, and thus our rights in relation to those resources.

Another highly important part of the context for the present comments is that NCC has been, and will continue to be, highly engaged in the Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador (“RA”). As such, and given the fact that the Orphan Basin Project

would be located within the RA Study Area, a number of our comments on the Project naturally connect to that larger context.

NCC's participation in the time-intensive RA process has overlapped with participation opportunities on individual offshore projects, such as Orphan Basin, and this has created burdens and challenges for our small organization. Even without the RA, however, the 30-day review period is too short to allow NCC the time to fully absorb all the Project information and consult internally with our communities. NCC has raised the problem of too-short timelines in relation to environmental assessments on numerous occasions in numerous settings. As such, we remain frustrated with these short timeframes for participation because they make it difficult for us to participate in a fully meaningful way that allows us to understand all the ramifications of proposed projects and consider the likely extent of their impacts on our people and communities. All that said, NCC remains eager to participate in the various engagement opportunities on offshore oil and gas drilling so that we may have a chance to understand these projects better and express concerns about impacts on natural resources that, in turn, become impacts on us.

ORGANIZATION OF THESE COMMENTS

NCC's comments on the Draft EA Report and the Potential Conditions document are organized according to the document to which they refer. Within each section, comments are presented according to key categories of concern for NCC.

COMMENTS ON THE DRAFT EA REPORT

With respect, NCC finds that the Draft EA Report unfortunately falls somewhat short of meaningfully addressing our key concerns in relation to the Orphan Basin Project. During the engagement process, NCC raised several specific concerns about potential impacts to migratory birds and migratory fish that may be affected by exploratory drilling projects in the Orphan Basin. As mentioned in the Introduction, NCC oversees the harvest of birds and fish by NunatuKavut Community members. These harvests are highly valued by our people for a number of reasons, including the fact that they provide country foods for our members, which have health benefits, and also serve to connect us in important ways with our culture and traditions. Our specific comments, below, provide more detail on these and other gaps and problem areas we have identified in the Draft EA Report.

Fish and Fish Habitat – Atlantic Salmon

NCC observes that the Draft RA Report makes a number of references to the importance of Atlantic salmon to Indigenous groups, and also recognizes that impacts on access to the salmon resource can mean impacts on potential or established Aboriginal or treaty rights (see e.g. p. iii of the Report). The Agency rightly recognizes that NCC “holds food, social and ceremonial fishing licences [“FSC”] for species that may migrate between the project area and the Labrador coast.” (p. 110, emphasis added). Similarly, the

proponent noted, after correction by the Agency, that “the NCC holds two FSC licences for species such as salmon, trout, Arctic char, Atlantic cod, rock cod, herring, scallop, whelk, smelt and seal.”¹

While the acknowledgement of the importance of salmon to Indigenous peoples and their rights is encouraging, there are serious issues of importance to NCC that are not fully addressed in the report. This has in turn, in NCC’s opinion, affected the Agency’s conclusions about potential adverse impacts on salmon in unhelpful ways.

First and foremost, there is the issue of data gaps and how they are treated in the Report and reflected in its conclusions on environmental effects. To its credit, the Report acknowledges uncertainties and information gaps with respect to Atlantic salmon migration, overwintering areas and presence in the Project area. The following paragraph from p. 28 of the report summarizes the situation in relation to the Orphan Basin project:

“While there is a general understanding of the spatial and temporal distribution of Atlantic Salmon at sea, the information available is limited, which is complicated by evidence of climate change-induced alterations to Atlantic Salmon distribution patterns. Atlantic Salmon populations appear to migrate north to feeding areas, with most individuals from a population expected to migrate to the feeding grounds by the most direct path. Overwintering distribution is not well-defined but is generally believed to encompass an area from the southern Labrador Sea, to the eastern edge of the Scotian shelf, with the Labrador Sea as the primary overwintering area. The proponent stated there is no information on abundance, relative population composition or overwintering specific to the project area. However, it noted that research vessels have caught Atlantic Salmon within the project area in the spring.” (Emphasis added).

The Agency raises the uncertainty issue again at p. 33, stating: “As there have been few marine surveys of the species, their oceanic movement is not well understood”. Further, it notes at p. 34 that “DFO reviewed available information and confirmed the uncertainty regarding the at-sea migration patterns and habitat use of Atlantic Salmon.” (emphasis added).

As a result of the uncertainty, the Report states that “the proponent would be required [sic] participate in or support research on the presence and distribution of Atlantic Salmon in Eastern Canadian offshore regions” (p. 34), and mentions that a vehicle for such study was already available through ESRF. This requirement is included as a “follow-up” item (p. 35).

While NCC applauds the Agency’s recognition of the need for additional research on Atlantic salmon, as well as its encouragement of such research and the need to update Indigenous communities on research results, it is disappointed that – at the end of the day – this research would not be used to inform potential impacts of the Orphan Basin Project on this iconic and culturally important species. Instead, it seems clear from the Report that the research envisioned would provide information only on *future* offshore oil and gas exploration projects.

This is problematic for several reasons. First, the need for up-to-date, pertinent information from which determinations about effects of the Project can be made is quite serious. It seems both the Agency and the proponent have leaned heavily on Atlantic salmon information derived from a 10-year old COSEWIC

¹ BP Canada Energy Group ULC, “Response to Information Requirements and Clarification Requirements,” Newfoundland Orphan Basin Exploration Drilling Program, April 2019, p. 318, correcting Table 7.15 of the EIS.

study. More recent research is needed, especially research that captures the health and behaviour of salmon as in the increasingly warmer waters of the Northwest Atlantic.

Second, the research relied upon by the proponent in the EIS does not cover the Labrador population of Atlantic salmon. The Agency has not asked, to the best of our knowledge, the proponent to provide information relating to that population. This is highly unfortunate because 1) this is the salmon population of greatest significance for NunatuKavut Community members and 2) it has already been recognized that there is a fair amount of uncertainty around migration patterns of Atlantic salmon. Given the important role that salmon plays in our culture and communities, and the fact that it is still uncertain the extent to which this population migrates through the Project Area, NCC believes that research on the migratory behaviour of this salmon population is needed *before* exploratory drilling begins.

Third, without adequate baseline information on migration, habitat and seasonal sensitivities of Atlantic salmon in the Project Area and larger regional area, it becomes extremely difficult to measure the type and magnitude of impacts that the Project is having on Atlantic salmon. Thus, while the Draft EA Report recommends certain mitigation measures for fish and fish habitat in relation to discharges of drilling muds and other substances (e.g., p. 35), measuring the impacts of those mitigation measures on real fish in the area becomes near to impossible in the absence of good baseline data.

This leaves NCC, and likely other Indigenous groups for whom Atlantic salmon is a keystone species, in a difficult predicament in relation to the Orphan Basin Project and similar exploratory drilling projects in the region: decisions about potential Project impacts on Atlantic salmon are being made on the basis of old and incomplete research findings. While further study is a laudable goal and item for “Follow-up”, it will not assist at all in evaluating the impacts on salmon of the current Project, and the lack of proper baseline information on this species in relation to the regional area renders the evaluation of effectiveness for mitigation measures nearly impossible. In the end, that leaves NCC with essentially no assurances that planned mitigation measures in relation to Atlantic salmon might work, and without such assurances, the promise of mitigation is empty.

In sum, the current treatment of the issue of Atlantic salmon in the current environmental assessment does not represent a precautionary approach. That is worrisome because a precautionary approach is what is called for when projects may involve potential environmental effects that can reach back to Indigenous communities, culture, well-being and fundamental rights.

In light of the points above, NCC is disappointed with the Agency conclusion that “the Project is not likely to cause significant adverse environmental effects on fish and fish habitat.” (p. 36). Given the obvious data gaps and uncertainties, particularly in relation to Atlantic salmon, NCC does not understand on what basis the Agency can come to this conclusion, and implores it to reconsider this conclusion and wait until more research findings become available.

NCC also wishes to remind the Agency that the RA Committee for the NL RA has recognized that “Atlantic salmon are of great important to Indigenous groups and that there is a current lack of completed and up-to-date knowledge about their presence, distribution and timing in the marine environment of the Study Area,”² and is asking DFO to accelerate its research on this topic. With respect, NCC asks the Agency to wait for findings from this study, which is aimed precisely at the information missing in the present

² RA Committee, DRAFT, Preliminary Recommendations, p. 2.

situation with Orphan Basin, before proceeding with a premature determination about the impacts of the Project on Atlantic salmon.

Migratory Birds

The Draft EA Report does not prevent sufficient information about the potential impacts of the Project to two types of sea ducks harvested by our people: murres and eiders. While there are several references in the Report to these ducks, solid baseline data on presence on migration patterns for these ducks are largely lacking. To the best of our knowledge, the proponent did not conduct field work on these or other marine and migratory birds prior to preparing the EIS for this Project. The absence of proper baseline data makes it very difficult to assess any effects on these populations after the Project begins.

As well, NCC found no references in the report to the fact that these sea ducks are important to members of NunatuKavut (for reasons explained above). This is disconcerting, because should these birds be negatively affected by the Project, our communities could feel the impacts. Again, the concern is not only about potential decreases in the number of birds available for harvest (NCC puts a strict limit on the harvest of Common Eiders), but also the health of the birds and the cultural significance of bird hunts to our communities. As such, NCC would want to be notified of dead birds found on or around exploration drilling platforms and supply vessels in the Orphan Basin.

Additionally, the impacts on migratory birds more generally, such as those due to stranding on offshore infrastructure and supply vessels, do not seem to lend themselves to generalization and thus fill knowledge gaps on murres and eiders due to the presence of uncertainty in the research. At p. 45, the Report states that “ECCC identified an uncertainty as to the level of effect on migratory birds and, thus, the need for a systematic monitoring protocol to search for and document stranded birds.”

Lastly, NCC notes that the Draft EA Report mentions that it is possible that flaring could, in some cases, be replaced by alternative methods, such as “formation testing while tripping”. NCC is curious to know why the use of this must be approved by C-NLOPB. What is the justification for this procedure? Why can’t this alternative method be used simply “if feasible”?

Special Areas

As the Draft EA Report points out, oil and gas exploration activities are not – unfortunately, in our view – prohibited in special areas that overlap with exploration licences (p. 50). NCC finds it difficult to square the fact that fishing has been excluded from some of these areas, while oil and gas exploration is allowed when the reason for the closure is to avoid activities on the seabed that might disturb sponges and corals, which in turn provide key habitat for fish and other sea life. It is clear from information provided by the proponent in the EIS that there is a risk that exploratory oil and gas drilling may affect sponges and corals.

In light of this, NCC is disappointed in the Draft EA Report conclusion that there will likely be no adverse effects to special areas after mitigation measures, like seabed surveys, are factored in. As the Report states, the proponent identified five special areas which could overlap with the zone of influence of drilling projects, and we note that most of these are home to murres – a species important to NCC.

Commercial Fisheries

As both the proponent and Agency have observed, NCC and its economic development corporation, Nunacor, hold several communal commercial licences for groundfish, shrimp, snow crab capelin, and other species and some of these licences are in NAFO zones 3K and 3L, which overlap with Project Exploration Licences (p. 68). As such, NCC is understandably concerned about potential Project effects on these fisheries. This is particularly since “access to fishing areas could be restricted during exploration drilling through the establishment of a safety exclusion zone” around the Mobile Offshore Drilling Unit (MODU) that would “prohibit commercial fishing and non-project-related-vessels from the area, creating a localized fisheries exclusion zone.” (pp. 65-66). The Draft EA Report conclusion that “it is unlikely a substantial change in availability of resources would be created” seems tightly connected to the idea that there is a “small amount of commercial harvest in the project area” (p. 66). NCC respectfully reminds the Agency that a “small” harvest can have not-so-small impacts in small communities.

Current Use of Lands and Resources for Traditional Purposes and Health and Socioeconomic Conditions of Indigenous Peoples

For many of the reasons already covered above, NCC disagrees with the conclusion in the Draft EA Report that “[i]t is unlikely that Indigenous peoples finishing or harvesting for food, social or ceremonial purposes would come in contact with any project components or realize any adverse impacts in their traditional territories from project operations.” (p. 73). Similarly, and with respect, NCC takes the position that there is simply not enough information currently available to justify the following conclusion in the Draft EA Report:

“It is unlikely that Indigenous peoples fishing or harvesting for food, social, or ceremonial purposes would come in contact with any project components or realize any adverse impacts in their traditional territories from project operations. The proponent would also be required to implement measures to mitigate effects to fish and fish habitat, marine mammals and sea turtles, and migratory birds (refer to Section 6.1, Section 6.2, and Section 6.3) such that there would not be a perceptible change to the current use of traditionally valued species (e.g., Atlantic Salmon) or a change in the health and socioeconomic conditions of Indigenous peoples as a result of project operations.” (p. 73).

As well, we understand the Agency chose to deal with the issue of commercial fisheries under a separate chapter in the report, but that should not negate the fact that the state of our communal commercial fisheries can clearly affect the socioeconomic conditions of NunatuKavut coastal that are closely linked to those fisheries.

Accidents and Malfunctions

NCC’s review of this section of the Draft EA Report revealed several gaps of concern and all concern methane – a very powerful greenhouse gas. In the discussion concerning blowouts and other unplanned releases of oil or gas below the water, the Agency dismisses too quickly, in our view, the risk that a large, sudden release of hydrocarbons into the water column from a blowout or spill could pose to oxygen levels in the water. The Draft EA Report mentions that the Kwilmu’kw Maw-klusuaqn Negotiation Office raised this issue (p. 88), but then goes on to dismiss the concern on the basis of one modelling study. Ever since the Deepwater Horizon catastrophe resulted in an estimated 1 million-ton deficit in dissolved

oxygen attributed to bacterial consumption of escaped methane,³ scientists have continued to study how methane leaks and natural seeps can result in deoxygenation.⁴ Since climate change is already causing some deoxygenation in our oceans, it is imperative that we not add to the problem through accidental subsea releases of methane.

Unfortunately, the proponent barely touched upon this serious issue in the EIS, and we now ask the Agency to take a precautionary approach that reflects the urgency of the climate crisis and require the proponent to plan for a careful study of deoxygenation, should a blowout or major underwater release occur. This could be done, for example, in the context of the proponent's spill response plan.

A related gap in the proponent's EIS that needs correction and attention by the Agency in its final EA Report concerns prevention of methane leaks, both underwater and directly to the atmosphere. From a brief review of the subject, NCC has become aware that a large body of knowledge currently exists on prevention, leak detection and mitigation of fugitive emissions and other methane releases in relation to offshore platforms, whether for exploratory or production work. Again, NCC would be pleased to share this body of literature with the Agency upon request.

NCC believes that the proponent, particularly as a part of the gas and oil industry, has a responsibility to minimize methane releases of all kinds because, in the words of a Princeton University researcher: "The fastest way to reduce the effects of greenhouse gases significantly is by decreasing methane emissions".⁵ Researchers such as those at Princeton University have said that that controlling methane leaks around oil and gas wells – whether on land or at sea – offers a powerful way to combat climate change.⁶ In a recent study, Princeton researchers found that offshore oil and gas rigs in the North Sea leak more than twice as much methane as they report to the British government, and they did this using measurements from fishing boats downwind of offshore rigs when they were in stand-by mode (e.g., no flaring or transfer of oil).⁷

Effects of the Environment on the Project

NCC encourages the Agency to include in this section of its final EA Report any impacts of climate change on the effects of the Project, on the logic that climate change impacts now affect the environment in countless ways, and a fulsome review of impacts of the Project would include possible interactions between the potential impacts of the Project, such as discharges of drilling muds, etc., and factors like warmer ocean temperatures, higher acidity, and deoxygenation. NCC has become aware of research suggesting that increased temperature generally increases the toxicity of hydrocarbons and other

³ Reference available upon request.

⁴ NCC has compiled a large set of references on this topic, and would be pleased to share them with the Agency upon request.

⁵ Steven Schultz, "Q & A: Princeton U. researchers say controlling methane leaks can 'pay off quickly' to lessen effects of climate change", State Impact Pennsylvania, Sept. 22, 2019, <https://stateimpact.npr.org/pennsylvania/2019/09/22/qa-princeton-u-researchers-say-controlling-methane-leaks-can-pay-off-quickly-to-lesser-effects-of-climate-change/>.

⁶ Ibid.

⁷ Ibid.

substances. In that light, we encourage the Agency to take into account, since the proponent has not, how potential impacts may change over the life of the project as the climate change impacts increase.

Cumulative Environmental Effects

NCC strongly encourages the Agency to take a much broader view of cumulative environmental impacts for the Orphan Basin Project than is currently reflected in its section on this topic. In the Draft EA Report, there are two statements that simply are not easily reconciled. At p. 107, the Report states that the Agency is “of the opinion that the residual environmental effects of the Project could interact cumulatively with the effects of other projects and activities.” That would seem to make a great deal of common sense, given that – as the Agency itself points out – the Orphan Basin Project will be very to fairly close (adjacent to less than 50km) to three other exploratory and delineation oil and gas drilling projects, and within 300 km of many other projects, four of them in current production, and others that are exploratory projects (pp. 99-101).

In its conclusion on this section, however, the Agency states: “Taking into account the implementation of the mitigation measures proposed for the Project, the Agency concludes that the Project is not likely to cause significant adverse cumulative environmental effects.” NCC has difficulty understanding how this conclusion can flow from the information mentioned above, which appears in the same section of the Report.

We also note that in this section, at p. 100, the Agency lists some 14 seismic or other geophysical survey projects but omits to include the distances to the Project area, and this should be corrected in the final EA Report.

Impacts on Potential or Established Aboriginal or Treaty Rights

With respect to Atlantic salmon, the Draft EA Report states at pp. 113-114: “The Agency determined that because the Project’s activities would likely have limited effects on these fish species (Section 6) it would also likely have a low impact on the potential or established Aboriginal or treaty rights of Indigenous groups with food, social, and ceremonial licences to harvest migratory species.” With respect, we find this formulation somewhat tautological, and in any case premature given that elsewhere, at several points in the Report, the Agency mentions the uncertainty that exists in relation to migration patterns etc. of salmon and that additional research is needed. In fact, at p. 112 the Report states that “The ESRF [salmon study] is designed to assist in the decision-making process related to oil and gas exploration and development.” In any case, the absence of clear data or information should not lead, by default, to a conclusion of no or low impact.

With respect to the impacts of an accidental spill or subsea blowout on Indigenous fishers and communities, however, NCC agrees with the Draft EA Report statement that: “The potential impacts from a spill event may decrease the quantity, quality and health of the fish harvested by Indigenous groups.” (p.114). While the Agency views the possibility of a serious accident as unlikely, it states that since “there is potential for more serious effects” on species like Atlantic salmon or species at risk, there are therefore “potential impacts on the potential or established Aboriginal or treaty rights of Indigenous groups.” (p. 114).

COMMENTS ON THE POTENTIAL CONDITIONS DOCUMENT

Disclaimer and note: While NCC is pleased to provide comments on the Potential Conditions document, such comments should not be interpreted as evidence of a position that the Project should go ahead. That said, we trust that NCC's comments, presented according to the numbered conditions in the document, offer certain specific suggestions and recommendations that could substantially improve the conditions in certain areas.

2.1 NCC is pleased to see the requirements in this condition that the proponent consider its actions within the Project in a careful and precautionary manner, promote sustainable development and include community and Indigenous traditional knowledge, among other things. This condition would be strengthened, however, by the addition of specific consequences for not fulfilling those requirements.

2.5.1 and 2.5.3 NCC is concerned that these conditions presume that the proponent does, in fact, have baseline data against which effects of the project may be compared in order to verify the accuracy of environmental assessment predictions and to measure impacts. Unfortunately, however, NCC's review of the EIS did not reveal either possession or the intent to develop up-to-date baseline data for all of the valued components. Specifically, Chapter 6 of the EIS on the "Existing Biological Environment" indicates that: "This description of the biological environment relies substantially on previous research; no field work was conducted as part of this EIS." Given that some of the previous research is over now 10 years old (e.g., COSEWIC on Atlantic salmon) and that there may be important variations at specific well sites, NCC recommends that the Agency require complete and up-to-date baseline information to be gathered by the proponent since only that quality of baseline information will provide a useful standard against which to measure actual environmental effects at specific sites.

2.5.4 NCC recommends eliminating the word "economically" in relation to mitigation measures. Otherwise, sorely needed protection against adverse environmental effects may take a backseat to economic concerns as a matter of course, which would be inappropriate.

2.13 In the third line of the paragraph, NCC recommends the preferred term "may potentially result in adverse environmental effects" rather than simply "may result in...". Also, the last sentence in this condition, referring to "the consultation with Indigenous groups and relevant authorities" is unclear. Please clarify what is meant by "the consultation".

3.12 Please refer to our comments under **2.5.1** and **2.5.3**, above.

3.13 NCC is pleased to see this condition requiring the proponent confirm its intent to participate in research pertaining to the presence of Atlantic salmon in the Eastern Canadian offshore areas.

4.2.5 This condition needs clarification in relation to roles as between the proponent and the Board. Specifically, who makes the determination whether flaring would occur during a period of migratory bird vulnerability? In our opinion, neither the proponent nor the Board are the proper bodies to make that determination. Instead, NCC recommends that such determination be made by persons with the

necessary expertise, such as Environment and Climate Change Canada's Canadian Wildlife Service, with input from Indigenous groups.

5.1.1 Two weeks notice to Indigenous groups (and commercial fishers) in advance of planned drilling activity is too short. The length of this notice period should be developed in consultation with Indigenous groups, who in some cases (such as NCC) are also commercial fishers, in order to select timeframes that are fair and viable in relation to planning of fishing activities by Indigenous commercial fishers.

5.2 This condition requiring the proponent to develop and implement a well and wellhead abandonment plan should include a requirement that the plan include monitoring for methane leaks at the abandoned well or new seeps nearby.

After 6.1.2, additional condition needed

A serious lacuna in the Potential Conditions document is that it imposes no conditions on the proponent with respect to the prevention, detection, monitoring or mitigation of methane from the exploration drilling platforms to be used in this Project. Methane reduction has been a key concern of research on offshore oil and gas drilling and is attracting increased attention by the industry and with good reason: it is among the most potent of greenhouse gases. Given the fact that the proponent has not included any information on these important matters in the project documents to date (i.e., Project Description, Environmental Impact Statement and responses to IRs), it is entirely reasonable that the Agency establish such conditions for the proponent. As Canada, and the world, confront the climate crisis, adding conditions to ensure the prevention, detection and mitigation of leaks and releases of this potent greenhouse gas should be viewed as a serious responsibility for the Agency in relation to this and all offshore oil and gas projects.

6.7 The condition begins with the phrase: “Considering the views of Indigenous groups”, but the intention is not clear in relation to the development of a Spill Response Plan. It appears that this is referencing an implied obligation by proponents to consider the views of Indigenous groups. NCC prefers a more direct approach of stating such obligation explicitly (e.g., “The proponent shall discuss its Spill Response Plan with Indigenous groups and then shall prepare and submit the Plan to the Board for acceptance prior to drilling.”).

After 6.10.4, additional condition needed

NCC recommends adding a condition, 6.10.5, that would require the proponent to measure methane released in connection with a blowout or other major subsea accident as well as oxygen levels in the vicinity of the accident, both immediately following the spill and later. The purpose would be to check for deoxygenation, which could potentially affect living things near the accident site. Methodologies for measuring subsea reduction in oxygen when methane is consumed by bacteria have been in use at least since the well-known blowout at the Deepwater Horizon rig, where researchers studied the massive oxygen anomaly left behind after bacteria consumed most of the methane released during the blowout.

SUMMARY OF KEY CONCERNS

In these comments, we have identified a number of specific issues in need of further detail, clarification or improvement for both the Draft EA Report as well as the Potential Conditions document. On a general level, our key concerns in relation to each document are outlined in the bullet points below.

In relation to the Draft EA Report, NCC is concerned:

- That insufficient information on the potential impacts to key species of migratory fish and birds harvested by NunatuKavut members as important and culturally significant country foods, is leading to the Agency to make premature conclusions that the Project will not result in adverse environmental effects to the people in our communities, provided the required mitigation measures are executed. NCC is particularly concerned about the lack of information and/or uncertainty concerning potential environmental effects of the Project on Atlantic salmon (Labrador population), murre and eider ducks.
 - In relation to salmon, there are numerous statements in the Report indicating the need for further research, through ESRF for example, and NCC believes it is far preferable to wait for the study results than make decisions on the basis of incomplete or low quality data.
- That the potential impacts to NCC's harvests under its communal commercial fishing licences in NAFO zones 3K and 3L, which overlap with Exploration Licences within the Project Area, are greater than represented in the Agency's analysis. In particular, the impacts of temporary fishing exclusion zones and the possibility of an oil spill or blowout in the region may bring negative consequences that mitigation measures may not fully address.
- That exploratory drilling activity would not, after mitigation, amount to something less than an adverse environmental effect on the ocean floor and the life that inhabits it.
- That it is unlikely that Indigenous peoples would come in contact with project components or experience any adverse impacts linked to Project operations. This view ignores the links between different elements of the environment and NCC communities, as well as the links between NCC's communal commercial fisheries activities and community wellbeing.
- That the Agency has not yet required more stringent plans from the proponent on preventing, detecting and mitigating methane releases below and above the water at oil and gas drilling platforms given the urgency of the climate crisis and the availability of strong research and industry guidance on reducing methane emissions.
- That the "Effects of the Environment on the Project" section of the Report does not discuss how climate change impacts like climbing ocean temperatures, increases in ocean acidity and ocean deoxygenation are not yet being considered as factors that can influence the effects of a discharge, spill, etc. via interaction and synergistic effects.

- That the Cumulative Effects analysis is being construed much more narrowly than is warranted given the high level of oil and gas activity in the region.
- That the arguments concerning impact on Aboriginal or Treaty rights are somewhat circular and are missing the importance of connections among indirect and direct effects.

Key concerns in relation to the potential conditions document

- Certain conditions (e.g., 2.5.1, 2.5.3 and 3.12) are predicated on the existence of baseline information that does not necessarily exist because it has not been gathered. The proponent has not conducted any field work, for example, and such studies are important for being able to make valid comparisons of effects on fish, birds, etc. before and after project implementation.
- The two-week notice period that the proponent is required to give to Indigenous groups and commercial fishers (understanding that NCC also participates in commercial fisheries) is too short. Ideally, the length of the notice period would be developed in collaboration with Indigenous groups and commercial fishers.
- There are currently no conditions requiring the proponent to undertake and report on its activities aimed at preventing, monitoring, detecting and mitigating methane from all exploration drilling platforms to be used in the Project. Particularly in light of the climate crisis, the proponent's lack of attention to these matters must be remedied by the Agency through imposition of new conditions. Additionally, condition 5.2 should be modified to require the proponent to including methane monitoring for abandoned wells.
- A new condition should be imposed on the proponent in relation to potential blowouts: as part of the proponent's post-accident plan, the proponent should be required to measure oxygen levels in the water to check for deoxygenation, which can happen when blowouts deep under the sea result in large releases of methane. Deoxygenation can affect ocean life, which is already being stressed by the reduced oxygen levels that have been accompanying the warming of the oceans.

CONCLUSION

After careful review of both the Draft EA Report on the Orphan Basin Exploration Drilling Project and the document on Potential Conditions under CEAA 2012, NCC has identified a number of gaps and other issues in need of improvement or resolution in both documents. NCC respectfully submits this input to IAAC for careful consideration prior to preparation of a final EA Report for the Minister.

Additionally, NCC hopes that the Agency will consider waiting until the NL Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador is complete before submitting the EA Report on this or other proposed exploratory drilling projects to the Minister for final approval. NCC believes there are substantial benefits to be gained by all parties in taking such an approach.

NCC thanks the Agency for the opportunity to participate in the review of this Project and looks forward to continuing the conversation about the Project and its potential impacts on NunatuKavut communities. To that end, we would be pleased to answer any questions in relation to the present comments.