

Environmental Assessment Amendment of the Husky Delineation/Exploration Drilling Program for Jeanne d’Arc Basin Area, 2008-2017 (LGL November 2017)

GENERAL COMMENTS

Canada – Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)

Original comment:

In Section 2.3 of the May 2017 Amendment, Husky states that the mitigation measures described in the original EA (LGL 2007a) remain applicable to this project within the context of a three year scope extension. In respect of accidental events, Husky should review the content of Section 8 of the original EA (LGL 2007a), and the related report by SL Ross Environmental Research Ltd (2007b), Oil spill fate and behaviour modeling in support of Husky’s 2007 drilling EA.

The review by Husky should verify that the environmental data used to conduct the modelling is consistent with current information regarding ocean currents, wind, sea ice conditions, and air and water temperature. In addition, Husky should verify that the oil properties, volumes and flow rates of batch spills and accidental losses of well control (blowouts) are consistent with information obtained from Husky’s drilling programs conducted from 2008 to 2017.

In light of the review described above, Husky should determine whether or not the discussion of potential effects of accidental effects and the mitigations to be employed by Husky continue to remain relevant

Husky Reply:

See Subsection 3.2.1-Oil Spill Modelling

C-NLOPB Comment:

We would like the graphic information [i.e. diagrams on slick extent] from (Husky 2012) and/or (SL Ross 2012) to be presented to support the statements made in Husky’s response.

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Natural Resources Canada (NRCan)

Original comment:

On page 10 of the May 2017 Amendment document, the following conclusion is made: “Regardless of the worse-case scenarios associated with the 2012 modelling compared to the 2007 modelling used for the original assessment, the same conclusions were predicted...”

NRCan has some concerns about the appropriateness of the modelling and suggests that the Proponent consider updating their model based on knowledge gained from the Macondo spill. For instance, if the Proponent is assuming that 100% of the oil from a well blow-out will rise to the surface, the Macondo spill demonstrated that this is not the case. Oil spill research demonstrates that light crudes are easily dispersed and will form oil-mineral-aggregates that will stay subsurface. Given this, what proportion of the oil from a spill would be removed subsurface, and where would it go? What potential impacts could the resulting sludge have?

Husky Reply:

See Subsection 3.2.1-Oil Spill Modelling

NRCan Comment:

Without 3-dimensional modelling, they [Husky] cannot address our concerns for estimating the proportion of oil that would form the cloud in the water or where the cloud will move by ocean currents to indicate where oil deposition on the sea floor may occur. They are using a 2-dimensional model which only estimates the behaviour of the oil that rises to the water surface. We have no comments for the results of that model.

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Environment and Climate Change Canada (ECCC)

Original comment:

ECCC recommends that non-emergency flaring at night be avoided. If the proponent is unable to completely avoid flaring activities at night, ECCC recommends that the proponent identify methods to address risks to nocturnally migrating birds and breeding seabirds, particularly storm-petrels. ECCC recommends that the proponent identify periods of high risk for bird/flare interactions, measures to avoid injury of migratory birds, and monitoring plans which explore how flare timing can be modified. Furthermore, ECCC recommends that the proponent investigate the potential to install flare shields to reduce light emissions.

Ellis et al. 2013 state that bird stranding reports on vessels and platforms “cannot directly assess the mortality caused by strikes and flaring because it is unknown how many birds are killed and not recovered. More work is required to relate the numbers of birds found on vessels and platforms to the total number of birds dying from collisions and flaring.” Hence there is a strong need for research and monitoring to quantify mortality events, particularly around flares, and identify conditions leading to mortality events, by implementing a monitoring program incorporating bird detection technology on platforms and mobile drilling ships in order to design effective mitigation strategies.

Reference:

- Ellis, J. I., S. I. Wilhelm, A. Hedd, G. S. Fraser, G. J. Robertson, J.-F. Rail, M. Fowler, and K. H. Morgan. 2013. Mortality of migratory birds from marine commercial fisheries and offshore oil and gas production in Canada. Avian Conservation and Ecology 8(2): 4. <http://dx.doi.org/10.5751/ACE-00589-080204>

Husky Reply:

Husky has initiated a review of seabird research and monitoring options. We intend to discuss these options with ECCC in 2018.

ECCC Comment:

The proponent shall notify the Board at least 30 days in advance of flaring to determine whether the flaring would occur during a period of migratory bird vulnerability. The proponent shall detail how it plans to prevent harm to migratory birds in such an event.

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The Alder Institute

Original comment:

Approval of the 2007 EA ten years ago was provided in a context in which assumptions of negligible or low environmental effects on seabirds off Newfoundland and Labrador from offshore oil and gas extraction had been supported through decades by sustaining uncertainty (Fraser & Russell 2016). A state of cultured ignorance if you will.

For example, the unsubstantiated assumption that chronic sheens around rigs resulting from routine operations do not pose serious risks to marine birds has been based for decades on the absence of data to prove otherwise. Since the 2007 EA new research has shown that this assumption is no longer tenable. Morandin and O’Hara (2016) found that ocean disposal of operational discharges, including produced water meeting the Waste Treatment Guidelines, produces sheens around offshore oil platforms in Atlantic Canada that kill marine birds.

Husky Reply:

See Subsection 3. 1.2 -Sheens and 3.1.3 –Mitigation and Monitoring.

The Alder Institute Reply:

3.1.2 Morandin and O’Hara’s research is now referenced. See discussion below.

3.1.3. No discussion of reducing operational discharges of potentially sheen forming materials has been provided. No discussion of preventing the attraction of marine birds to offshore platforms has been provided.

Original comment

Despite overturning the shocking assumption that operational discharge sheens in the waters around oil rigs do not pose serious risks to marine birds Morandin and O’Hara were not able to estimate the frequency and extent of occurrence of these sheens due to the monitoring practices in place. Monitoring practices have failed to collect the data required to properly assess this risk. This failure contributes to sustaining uncertainty.

Husky Reply:

Husky has initiated a review of seabird research and monitoring options. We intend to discuss these options with ECCC in 2018.

The Alder Institute Reply:

This is encouraging. It should be part of any final EA revision. As stated it is an intention only and therefore not reviewable. We request that their review be provided to us when completed.

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Original comment

Issues surrounding the risks from flaring to marine birds attracted by lights remain outstanding. What are the probabilities of various species of marine birds encountering operational sheens? What are the probabilities of various species of marine birds encountering flares? After over sixty-five years of oil and gas activity on the Grand Banks we still don’t know the answer to these questions. The unquantified attraction of marine birds and other fauna to offshore platforms continues to be encouraged by marine discharges of sanitary and domestic wastes. The nutrient enrichment of platform environments in turn leads to unquantified increased risks of predation and encounters with hazardous waste and flaring.

Husky Reply:

See Subsection 3.1.1 –Artificial Lighting and 3.1.3 –Mitigation and Monitoring.

The Alder Institute Reply:

Is there a public file recording all flaring activity? Where is the discussion to back up the implied significance of LED lighting for marine bird attraction? Concerns remain outstanding. See discussion below.

Original comment:

The 2017 Amendment acknowledges recent declines in Leach’s Storm-petrel populations in Newfoundland but only refers to risks to these populations from accidental events, not operational discharges that would include flaring and increased rates of predation due to attraction to the platforms. The detectability of these incidental potential mortalities remains unknown. The 2017 Amendment provides no new discussion of the seabird literature as it pertains to the risks they encounter from offshore oil and gas activity. There is no discussion of the work by Morandin and O’Hara confirming that operational discharges are permitted which kill marine birds in direct contravention of the Migratory Bird Convention Act. There is no review of or presentation of data or research on the risks to Leach’s Storm-Petrels and other birds attracted by light of flaring.

There is a striking absence of modeling efforts applied to support EA predictions on the interactions between seabirds and oil industry activity in this region. Throughout 65 years of oil exploration and development off the coast of NL seabirds have been a prominent VEC of concern. A series of high profile megaproject EAs have consistently concluded that the negative environmental effects on seabirds of these projects are negligible or low. Important questions raised repeatedly with respect to offshore oil and gas activities and the risks to marine birds over the decades remain unanswered (i.e. Wiese et al 2001).

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Husky Reply:

See Subsections 2.2.2 -Seabirds, 3.1.1- Artificial Lighting, 3. 1.3 –Mitigation and Monitoring, 3.2.2 -Seabirds and Accidental Events/Malfunctions, and 3.2.3- Mitigation and Monitoring.

The Alder Institute Reply:

Our concerns remain outstanding despite the inclusion of a limited and misleading discussion of the work of Morandin and O’Hara.

Original comment:

We request detailed information on what use, if any, rigs contracted by Husky for this project make of Bay Bulls Harbour and if so, that Bay Bulls and the Witless Bay Ecological Reserve be included in the Project Area.

References Cited

Fraser, G.S., Russell, J. & Von Zharem, W.M. 2006. Produced water from offshore oil and gas installations on the Grand Banks, Newfoundland and Labrador: are the potential effects to seabirds sufficiently known? *Marine Ornithology* 34: 147–156.

Fraser, G.S., & Russell, J. 2016. Following-Up on Uncertain Environmental Assessment Predictions: The Case of Offshore Oil Projects and Seabirds Off Newfoundland and Labrador. *Journal of Environmental Assessment Policy and Management* Vol. 18, No. 1.

LGL Limited. 2017. Amendment of the Husky Delineation/Exploration Drilling Program for Jeanne d’Arc Basin Area, 2008-2017, Environmental Assessment. LGL Rep. FAO122. Rep. by LGL Limited, St. John’s, NL for Husky Energy, St. John’s, NL. 13 p. + Appendix

LGL Limited. 2007. Husky Delineation/Exploration Drilling Program for Jeanne d’Arc Basin Area, 2008-2017, Environmental Assessment. LGL Rep. SA935. Prepared by LGL, St. John’s, NL, in association with Canning & Pitt Associates, Inc., Oceans Ltd., and PAL Environmental Services. Prepared for Husky Energy Inc., Calgary, AB. 231 p. + Appendices.

Morandin, L.A. & O’Hara, P. D. 2016. Offshore oil and gas, and operational sheen occurrence: is there potential harm to marine birds? *Environmental Reviews*, 2016, Vol. 24, No. 3 : pp. 285-318

Wiese, FK, WA Montevicchi, GK Davoren, F Huettmann, AW Diamond and J Linke

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2001. Seabirds at risk around offshore oil platforms in the north-west Atlantic. Marine Pollution Bulletin , 42, 1285– 1290.

Husky Reply:

Husky does not anticipate a rig in Bay Bulls being under contract to Husky and therefore the rig owner would be responsible for regulatory compliance.

The Alder Institute Reply:

This is not a satisfactory response.

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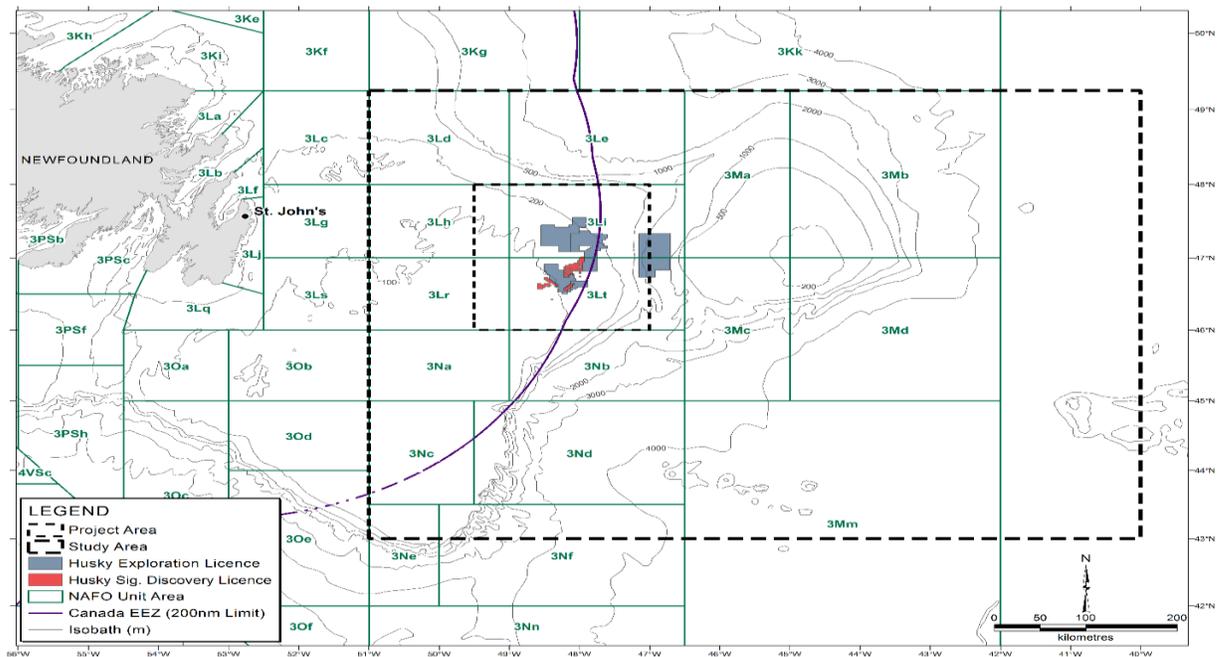
SPECIFIC COMMENTS

Fisheries and Oceans Canada (DFO)

Section 2.0 Project Description, page 4, the first sentence - “As detailed in the original EA, Husky proposed to drill up to 18 exploration / delineation wells on any current or future Husky land holdings in the Jeanne d’Arc Basin area during 2008-2017 within the Project Area.” It is also noted in Figure 2 (page 2) that the Geographic Scope of the Project Area now includes new Exploration License (EL) areas EL1151, EL-1152, EL-1121 and the western portion of EL-1134. These new EL areas (e.g. EL 1121, EL1151, and EL 1152) as well as EL-1134 have been included within a current Environmental Assessment process for a Husky exploratory drilling program 2018 – 2026 which is being led by the CEA Agency, under CEAA, 2012. It is not clear whether the submitted EA Amendment covers exploration/delineation activity on EL 1151, EL 1152 and EL 1121 and how this conflicts or duplicates the environmental assessment being lead by the CEA Agency in accordance with CEA 2012. This needs to be clarified and the link between the requested EA amendment and the current CEAA 2012 EA clarified accordingly.

Husky Reply:

All Project activities assessed in the original EA (LGL 2007a) will still occur in the Project Area defined in that EA (Figure 1) during the proposed three-year extension. The current Husky Exploration Licences (ELs) are shown in Figures 1 and 2. Note that only the western portion of EL 1134 occurs within the Project Area.



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DFO Comment:

The link between the Amendment, the current Environmental Assessment process for a Husky exploration drilling program, 2018-2026, and new Exploration Licences has not been clarified.

The Alder Institute

Section 3.5.3 Shorebase Facilities - the 2007 EA and the 2017 EA Amendment make no mention of Bay Bulls Harbour, adjacent to the Witless Bay Ecological Reserve. Neither is this reserve, a globally important seabird breeding area, included in the Project Area. On the contrary it is pointed out how far away it is. However, in April/May of this year a drill rig used in Newfoundland’s offshore was parked for weeks outside Bay Bulls Harbour in plain site of globally important nesting concentrations of Leach’s Storm-Petrels and other marine birds during the breeding season. The lights of the rig were clearly observed at night from Tors Cove.

Husky Reply:

Husky has no association with this activity.

The Alder Institute Reply:

To clarify, “this activity” is the presence of a lighted oil rig in Bay Bulls during the seabird breeding season. The example we provided is the West Aquarius in 2017. The West Aquarius is normally drilling for Hibernia of which Husky is not a partner.

However, in 2016 the example of “this activity” was the West Hercules which had just finished 18 months of drilling for Statoil and its partners which include Husky. In addition, the Bay Bulls Marine Terminal website lists Husky Oil as one of its clients. Husky’s answer that they have “no association with “this activity” is not correct.