



Oceans North Comments for Baffinland Iron Mines Corporation's 2021 Annual Report for the Mary River Project

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Dear Mr. Barker:

Thank you for the opportunity to comment on the Baffinland Iron Mines Corporation's Mary River Project 2021 Annual Report. We write specifically to your request for parties to comment on whether the conclusions reached by Baffinland in the *2021 Annual Report* are valid and the areas of significance requiring further supporting information or any changes to the monitoring program which may be required.

Oceans North believes that the Annual Report is a crucial part of the review process, especially given the further decline of narwhal abundance in Eclipse Sound in 2021. This situation warrants the identification of a more conservative and precautionary path forward for this project, guided by adaptive management processes. Accordingly, our comments focus on the information, strategies, and actions required to implement a more appropriate management strategy.

This submission covers three topics:

1. Problems in valid reasoning when reaching conclusions about the impacts of the project
2. Issues pertaining to approaches to reporting and omissions of information, and
3. Recommended changes to the project scope, monitoring programs, reporting structure and reporting requirements

Deficiencies in these topics decrease transparency and amplify uncertainty surrounding the scope and severity of Project effects. The Proponent's lack of integration of monitoring programming remains a major issue in the ability to understand the impacts of the project. Additionally, these persistent shortcomings impede review of the cumulative effects of the project against the predicted effects in the environmental assessment.

1. Problems in valid reasoning when reaching conclusions about the impacts of the project

- i. Concluding that open water shipping has no impact on narwhal

Baffinland states in its report that “[d]espite the elimination of both potential anthropogenic causal factors (underwater noise from icebreaking and impact pile driving for small craft harbour construction) in 2021 through adaptive management, results from the 2021 monitoring programs again indicated lower narwhal numbers in Eclipse Sound during the 2021 shipping season. Underwater noise from these sources is therefore not considered to be an influencing factor on narwhal abundance in Eclipse Sound during the 2021 season. Open-water shipping, the other Project contributor of noise in the RSA, is also not considered a likely cause of narwhal displacement from the RSA based on the available visual, acoustic, and tagging results collected to date.”

Baffinland appears to be suggesting that only icebreaking and pile driving activities could have influenced narwhal decline in the study area. This conclusion is not consistent with mainstream science, acoustic data and analysis from the study area, as well as harvester input, all of which confirm that prolonged and intensive industrial open water ship noise is indeed an influencing factor.

Baffinland states in the Annual Report Popular Summary that “*elimination of early season ice-breaking in 2021 further reduced residual uncertainty in that Project shipping is the primary driver of the observed change in narwhal abundance in Eclipse Sound.*” This is poor reasoning and, without explanation, seems to ignore measured and potential effects of project shipping as a cumulative disturbance.

ii. Assessing narwhal disturbance levels at 120 dB

Baffinland’s marine monitoring program has shown that the disturbance threshold for narwhal is in fact much lower than 120 dB. The point of long term monitoring in the RSA is to be able to detect changes, inform mitigation, and protect the region from project impacts. Baffinland should be using its own research in order to determine impact on whales, cumulative impacts over time, and mitigation required. This means using the known impact thresholds.

iii. Decline in narwhal could be due to natural exchange between summer stocks

There is some debate as to whether the Admiralty Inlet stock and the Eclipse Sound stock constitute one single stock. Currently DFO does not believe there is enough data to suggest this to be true. Regardless, mixing of the two stocks (should that be the case) should not look like extirpation from Eclipse Sound. Hunters have suggested that numbers have never been this low in recent history or historically. If this was a natural exchange, we would expect fluctuations to have occurred before based on prey or other environmental factors.

iv. Not addressing cumulative effects

Oceans North continues to implore the NIRB that cumulative effects are not sufficiently addressed in the current monitoring and reporting regimes. Baffinland’s assessment methods remain predicated on an assumption that each individual transit results in no significant impacts, and that, therefore, the combined impacts of ship transits each day, season, and year are likewise believed to be insignificant. This is an erroneous assumption and results in a conclusion unsupported by data collected over a meaningful timeframe. We suggest that validating the impacts of cumulative effects should begin with the integration of the results of the currently separate marine mammal and acoustic monitoring programs. The current approach stands as a

failure to appropriately incorporate consideration of cumulative effects into this process, and represents a major flaw in the impact assessment's conclusions.

v. Misunderstanding cumulative effects

Baffinland's analyses suggest a critical misunderstanding surrounding the nature of cumulative effects. Cumulative effects monitoring is fundamentally holistic in nature; it requires a degree of additive and synergistic analysis. It is not premised on assessing each year of data against the next, and drawing conclusions based on a linear relationship between one limited, isolated variable, and another. Accordingly, stating that shipping was lighter in 2020 versus 2019 does not preclude the possibility that overall cumulative effects may have caused the 2020 decrease in narwhal numbers.

2. Issues pertaining to approaches to reporting and omissions of information

- i. Cumulative effects still not monitored –there is ongoing uncertainty, raised in this process by, inter alia, Fisheries and Oceans Canada and Baffinland on jurisdiction and responsibilities. This requires clarity from NIRB.
- ii. Currently, marine monitoring program draft reports have been provided to the Marine Environmental Working Group only, which excludes communities and some other intervenors from reviewing the information in tandem with the Annual Report. As it stands, the 2021 Annual Report is incomplete. DFO and other MEWG members also raised these issues in their comments on the 2020 Annual Report.
- iii. In our previous comments on the 2020 Annual Report, we suggested that the reports should focus on the data from the year in the title (in this case, 2021) as well as avoid including superfluous materials that have been previously filed. Ideally, the Annual Report should provide regulators, communities, working groups, technical experts, and others with appropriate information to allow for an understanding of how conditions, including impacts and potential impacts, may have changed during the year in question. It is important to integrate older data into a cumulative effects monitoring review, but we note *again* that this has neither been included nor, to the best of our knowledge, completed. There are analyses and summaries of individual monitoring programs, but very little synthesis and many missing components.

3. Recommended changes to the project scope, monitoring programs, reporting structure and reporting requirements

The Annual Reports would benefit from a clearer Terms of Reference from the NIRB on what to include and what not to include in the report. They should include all 2021 data, including draft data if necessary. Right now some of the data is from 2020, and some is from 2021. For example, the narwhal numbers are only included in the draft to the Marine Environmental Working Group.

This is not public, other intervenors do not have the opportunity to comment on these reports in the Annual Report review process.

Oceans North remains concerned that many impacts to marine mammals are assumed by Baffinland throughout the assessment to be temporary and not significant, and therefore cumulative impacts on the animals of the repeated daily, weekly, and seasonal exposures are assumed to be non-significant. The failure to appropriately account for cumulative impacts is especially precarious considering the poor progress and development of Early Warning Indicators (EWIs) within the existing project. To some extent, a robust and effective EWI system can help compensate for a degree of uncertainty in impact assessment.

The lack of appropriate Early Warning Indicators ultimately amplifies the risk generated through current operations and by insufficient cumulative effects monitoring. In the NIRB's review of the 2020 Annual report, it is noted that marine monitoring programs "struggle to disentangle correlation and causation" and note that the relevant Term and Conditions are deficient. DFO, in their 2020 feedback, provided specific instructions on how to improve the current draft Early Warning Indicators. In the past, DFO has also provided a potential list of Early Warning Indicators.

There continues to be debate around the role of consensus-based decision making at the Working Group. Both the NIRB and relevant Ministers have made it clear that Baffinland should take direction from DFO. As yet, DFO's recommendations have not been implemented nor fully discussed within the MEWG.

Baffinland's discussion of working group activities (2021 Annual Report Appendix E, Attachment 3, pg. 4) omits many details of the Early Warning Indicator discussion, including that DFO has previously suggested multiple early warning indicators, in addition to publishing a major paper on the importance of understanding the correlation between cortisol in narwhal and shipping. Baffinland's explanation minimizes the importance of these contributions from DFO and neglects to mention Baffinland's directed efforts to diminish DFO's peer-reviewed research during the Phase 2 hearings. NIRB representatives have been present for many of these discussions. We suggest that a more detailed terms of reference for the annual reports may improve this situation. In sum, there is a persistent and increasing acute need for greater transparency and openness in this process.

Thank you for the opportunity to comment.

Sincerely,



Christopher Debicki
Vice President, Policy Development and Counsel
Oceans North