



By Email (info@nirb.ca)

August 10, 2022

Kaviq Kaluraq
Chairperson
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, Nunavut X0B 0C0

**Re: Request for Additional Technical Comments on the Production Increase Proposal
Renewal for Mary River Project**

Dear Ms. Kaluraq,

Nunavut Tunngavik Incorporated (NTI) is providing the following additional submission regarding Baffinland Iron Mines Limited's (Baffinland) Production Increase Proposal Renewal (PIP Renewal) Project Proposal for the Mary River Project.

NTI's submission takes into account the Nunavut Impact Review Board's (NIRB or Board) Notice and Procedural Guidance on the Assessment of Baffinland's PIP Renewal Project Proposal, the Reconsideration Reports related to the PIP Renewal from 2018 and 2020, the Reconsideration Report for Baffinland's Phase 2 Development Proposal, the submissions to date of the Government of Canada, the Government of Nunavut, Baffinland, Qikiqtani Inuit Association (QIA), and other interveners, particularly Hunters and Trappers Organizations (HTOs), as well as community organizations.

Executive Summary/Introduction

Baffinland proposes to maintain the 6 million tonnes per annum (mtpa) production, transportation and shipping limit of iron-ore previously approved on a temporary basis, and related activities, until December 31, 2022. Baffinland first received the temporary approval to increase its production, transportation and shipment of iron-ore from 4.2 mtpa to 6 mtpa in 2018, and the increase has continued between 2018 and 2021.

NIRB has provided guidance that:

- its assessment of the PIP Renewal Project Proposal should be informed by additional relevant information regarding changes to the potential for ecosystemic and socio-economic effects provided to the Board during the annual Monitoring Program and the relevant knowledge and experience shared by participants about potential effects of the existing Mary River Project during the Board's assessment of the Phase 2 Development Proposal;
- there is a need for the Board to conduct a thorough assessment of the PIP Renewal Project Proposal; and
- although commenters are proposing amendments to terms and conditions to address concerns about existing Project effects, given the short-term nature of the PIP Renewal, and recognizing that a decision in respect of the Phase 2 Development Proposal is

underway, the Board does not consider it appropriate to conduct a broad reconsideration of the Mary River Project's existing effects mitigation and monitoring program.

While the Board's is facing challenges in conducting an assessment of the PIP Renewal Project Proposal with constrained timelines and without a decision on the Phase 2 Development Proposal, NTI is concerned that the evidence before the Board regarding existing Project effects impacting wildlife, the environment and Inuit rights may not be adequately addressed in a timely manner and that existing impacts will persist. There must be a clear path forward for resolving the existing Project effects that are negatively impacting Inuit.

In the case that a decision is taken that the Phase 2 Development Proposal should not proceed at this time, Baffinland continues to be approved to produce, transport and ship 4.2 mtpa of iron ore and there is evidence before the Board that this level of production causes impacts that must be better monitored and mitigated using both Inuit Qaujimajatuqangit and western science. NTI calls on the Board to make a determination regarding the next steps that should be taken for a full reconsideration of Project terms and conditions in the event that the Phase 2 Project Proposal is not allowed to proceed, or proceeds without fully considering amendments to terms and conditions to address current Project impacts. There must be a plan in place to resolve the substantial unaddressed Project impacts through a full reconsideration of Project terms and conditions.

This is vital as since 2018, the Board's Reconsideration Reports indicate that there are existing impacts from the Mary River Project without mitigation strategies that are proven to be effective. On the issue of dust, the Reconsideration Reports indicate a continuing issue regarding dust impacts that require better monitoring and mitigation.¹ Additionally, the Board's Reconsideration Report in 2018 noted that at the 4.2 mtpa production level that local harvesters had "observed declines in the numbers of seals and other marine mammals in the traditional harvesting areas surrounding Pond Inlet" and because of limited monitoring data on various environmental components through Baffinland's project monitoring efforts, it was unclear whether the mitigation and adaptive management strategies for the project were effective.²

The evidence collected by the Board during the assessment of the Phase 2 Development confirms that there are existing impacts from the current Mary River Project to Inuit harvesting, wildlife and the environment that are not being adequately monitored and mitigated. There is also evidence on the record that the "no significance" assessments of Baffinland regarding potential impacts to wildlife, the environment and Inuit harvesting cannot be relied on due to significant gaps in monitoring from both western science and Inuit Qaujimajatuqangit perspectives. Core issues include:

- Monitoring and mitigating impacts of dust;
- Monitoring and mitigation impacts on marine mammals, particularly on narwhal and ringed seal;
- Monitoring and mitigating impacts of non-Indigenous species and aquatic invasive species from ballast waters;

¹ Nunavut Impact Review Board, Reconsideration Report and Recommendations for the Production Increase Proposal, Baffinland Iron Mines Corporation Project Certificate No. 005, NIRB File No. 08MN053, August 31, 2018, see p. 25 and specifically "there is already concern about existing dust emissions along the Tote Road and concern that current dust suppression activities have not been very effective" and Nunavut Impact Review Board, Reconsideration Report and Recommendations for the Extension Request to the Production Increase Proposal, Baffinland Iron Mines Corporation Project Certificate No. 005, NIRB File No. 08MN053, March 2020, see p. 28.

² Ibid. Nunavut Impact Review Board, Reconsideration Report (2018) at pgs. 25-26.

- Monitoring and mitigating impacts on caribou;
- Monitoring and mitigating impacts on Inuit harvesting;
- Integration of Inuit Qaujimajatuqangit in monitoring and in adaptive management responses; and
- Addressing critical gaps in baseline data and discrepancies in predicted impacts (Baffinland's significance determinations) and actual impacts.

NTI understands that not all of the documented issues and evidence can be addressed within the short time frame allotted for this reconsideration process and therefore recommends that the Board provide direction in its determination report to the Minister pursuant to section 12.8.3 of the Nunavut Agreement regarding a broader reconsideration in the event that the Phase 2 Project Proposal does not proceed or proceeds without a full reconsideration of terms and conditions. A broad reconsideration of terms and conditions is warranted to address the current systemic monitoring and mitigation gaps and current ecosystemic and socioeconomic impacts of the current Mary River Project documented by the Board in its Reconsideration Report for the Phase 2 Project Proposal.

As requested, NTI's submission is providing focused recommendations related to the terms and conditions specified by the Board, with some additional comments on broader issues.

Table of Contents

1. Introduction to Technical Issues
2. Technical Issue #1: Mitigating the Impacts of Dust
3. Technical Issue #2: Mitigating the Impacts on Marine Mammals
4. Technical Issue #3: Unaddressed Impacts and Gaps within current scope of Reconsideration
5. Summary of Recommendations

1. Introduction to Technical Issues

NTI's main technical comments pertain to impacts from dust and impacts to marine mammals. These issues were addressed in Amendments 2 and 3 to the Project Certificate in 2018 and 2020 respectively. In 2018, the Ministers proposed an additional paragraph to term and condition No. 10 (Air Quality - Dust Management and Monitoring Plan). In 2020, the Ministers added term and conditions Nos. 183 and 184 to address impacts to marine mammals.

Additionally, NTI's technical comments extend to a discussion of impacts that cannot be adequately addressed through modifications exclusively to terms and conditions Nos. 10, 179, 183 and 184.

2. Technical Issue #1: Mitigating the Impacts of Dust

The impact of dust remains a major unaddressed concern from current production and transportation activities at the threshold of 6 mtpa. Community members and Inuit hunters are reporting effects on available drinking water, vegetation, fish and wildlife. As discussed, impacts from dust were documented by NIRB in its 2018 Reconsideration Report and resulted in the Ministers introducing a final paragraph to Term and Condition No. 10. Term and Condition No. 10 states:

The Proponent shall update its Dust Management and Monitoring Plan to address and/or include the following additional items:

- a) Outline the specific plans for monitoring dust along the first few kilometres of the rail corridor leaving the Mary River mine site.
- b) Identify the specific adaptive management measures to be considered should monitoring indicate that dust deposition from trains transporting along the rail route is greater than initially predicted.
- c) Outline specific plans for monitoring dustfall at intervals along and in the vicinity of the Milne Inlet Tote Road to determine the amount and extent of dustfall.
- d) Identify the specific adaptive management measures to be considered if monitoring indicates that dust deposition from traffic on the Milne Inlet Tote Road is greater than initially predicted.

The Proponent shall implement its Dust Management and Monitoring Plan, report all monitoring data to the NIRB annually, and take all adaptive management measures described in its Dust Management and Monitoring Plan if monitoring indicates that dust in the ambient air or dust deposition from the increased traffic associated with the increased volume of ore being shipped is greater than initially predicted.

However, Term and Condition No. 10 has not achieved its purpose in preventing impacts and dust impacts continue to interfere with the use of the area by Inuit. In 2020, NIRB's Reconsideration Report acknowledged that:

Baffinland has not made clear commitments regarding how dust generated from increased ore haulage activities along the Tote Road as well as ore crushing and stacking activities would be prevented, and if there is any mitigation strategy that could be employed to address the associated potential for adverse environmental effects.³

As a result, there have been continuous impacts from dust as documented in NIRB's Reconsideration Report on the Phase 2 Project Proposal. Specifically, NIRB stated:

dust emissions warrant the application of a higher level of the precautionary principle... the Board requires the Proponent to demonstrate a full understanding of the effects that these emissions are already having on community members' willingness to engage in their normal use of land, water and ice to harvest fish, wildlife and vegetation when dust is visibly impacting the land, water, vegetation and wildlife.... the Board recommends that Baffinland develop and communicate their understanding of the current Mary River Project and implement tangible adaptive management strategies not contingent on scaling up operations.⁴

Baffinland, in its June 15, 2022 memo, proposes additional environmental mitigation measures including for reducing the impacts of dust and implementing the recommendations from a dust audit. NTI recommends that concrete mitigation actions that substantially reduce the impacts of dust be included in Term and Condition No. 10 to the satisfaction of community members, Inuit hunters and QIA.

³Nunavut Impact Review Board, Reconsideration Report and Recommendations for the Extension Request to the Production Increase Proposal, Baffinland Iron Mines Corporation Project Certificate No. 005, NIRB File No. 08MN053, March 2020, p. 29.

⁴ Nunavut Impact Review Board, Reconsideration Report and Recommendations for the Phase 2 Proposal, Baffinland Iron Mines Corporation Project Certificate No. 005, NIRB File No. 08MN053, May 2022, p. 208.

3. Technical Issue #2: Mitigating the Impacts on Marine Mammals

The impact of the current Mary River Project on marine mammals, particularly ringed seal and narwhal, is a critical outstanding issue. In 2018 and 2020, NIRB documented in its Reconsideration Reports that local harvesters had observed declines in the numbers of marine mammals in the traditional harvesting areas surrounding Pond Inlet.⁵

In 2020, the Ministers introduced Terms and Conditions Nos. 183 and 184 to address impacts to marine mammals. These Terms and Conditions state:

Term and Condition No. 183

The Proponent shall collaborate with the Marine Environment Working Group (MEWG) to develop impact avoidance or mitigation strategies for the protection of the marine environment, and shall implement these strategies. The Proponent shall implement any direction from the Department of Fisheries and Oceans (DFO), issued in furtherance of their mandate, for any avoidance or mitigation measures including cessation of any activity, for the protection of the marine environment.

The Proponent shall every six months provide to DFO a tracking table of
(i) collective recommendation of the other members of the working group, and
(ii) any directions from DFO.

For each, the table must show the Proponent's means of implementation. Where any direction or recommendations are not fully implemented, the Proponent shall include the rationale

Term and Condition No. 184

The Proponent shall collaborate with the Marine Environment Working Group to review the status of compliance with, and implementation of, all of the Terms and Conditions in Project Certificate No. 005 related to marine environmental protection.

Despite the introduction of Terms and Conditions Nos. 183 and 184, NIRB reported in its Reconsideration Report for the Phase 2 Project Proposal that due to current operations, several intervenors, community representatives, and members of the public have identified that they are seeing declines in the numbers of narwhals and seals in the area.⁶

NTI in its submissions to NIRB in the review of the Phase 2 Project Proposal emphasized that the narwhal stock size is not stable and by the determination of the Department of Fisheries and Oceans had decreased from about 20,000 animals in 2004 to about 12,000 in 2016. The abundance estimate was reported at about 10,000 animals in 2019 and a preliminary

⁵Nunavut Impact Review Board, Reconsideration Report and Recommendations for the Production Increase Proposal, Baffinland Iron Mines Corporation Project Certificate No. 005, NIRB File No. 08MN053, August 31, 2018, p. 25 and Reconsideration Report and Recommendations for the Extension Request to the Production Increase Proposal, Baffinland Iron Mines Corporation Project Certificate No. 005, NIRB File No. 08MN053, March 2020, p. 28.

⁶ *Supra*, note 4, p. 178.

abundance estimate of about 5,000 animals in 2020. A recent 2021 survey indicates a further significant decline in numbers of narwhal in the local area.⁷

It is clear that the decline in the narwhal population and lack of availability of narwhal is impacting local Inuit harvesting. NTI is also concerned that Inuit are observing several changes to narwhal and ringed seal. Hunters are reporting that some narwhal and ringed seal that are harvested are skinny and without much body fat. Hunters also reported the absence of ringed seal from certain traditional hunting areas.

NTI also remains concerned that there are significant gaps in the incorporation of Inuit Qaujimajatuqangit in establishing thresholds and management responses to mitigate impacts on marine mammals. NIRB in its Reconsideration Report for Phase 2 Project Proposal states its concern about the lack of application of Inuit Qaujimajatuqangit to Baffinland's monitoring measuring narwhals' reaction to underwater sound and NIRB also notes that there continues to be significant gaps in terms of general research or monitoring that would address critical baseline research in respect of marine species such as narwhal and seal that are essential to Inuit in the Region.⁸

In part, these issues stem from the challenges documented with the functioning of the MEWG. NIRB's Reconsideration Report on the Phase 2 Project Proposal documents the concerns of members of MEWG that it is not functioning effectively, resulting in inadequate consideration of Inuit Qaujimajatuqangit and scientific knowledge in the monitoring, mitigation and adaptive management measures.⁹ Terms and Conditions Nos. 183 and 184 rely on the proper functioning of the MEWG and cannot achieve their objective of adequately mitigating impacts on marine mammals if the MEWG is functioning in a limited manner.

Baffinland, in its June 15, 2022 memo, proposes additional measures that could assist in addressing impacts on marine mammals including measures to improve the functioning of MEWG, to develop Inuit specific indicators and mitigation thresholds and integrate them into Baffinland's adaptive management plan, to restrict the number of ore carriers and using ore carrier convoys to reduce the impacts off noise.

NTI recommends that Terms and Conditions Nos. 183 and 184 be amended to ensure that:

- the MEWG is functioning in a manner that is acceptable to all MEWG members;
- the collection of both Inuit Qaujimajatuqangit and scientific knowledge takes place to ensure the monitoring of impacts;
- there are requirements for the use of specific indicators and mitigation thresholds; and
- there are requirement for the use of specific mitigation measures to address potential impacts on marine mammals.

4. Technical Issue #3: Unaddressed Impacts and Gaps within the current scope of Reconsideration

NIRB's direction to limit the scope of this reconsideration process to a few terms and conditions results in evidence on the record before NIRB, and conclusions of the NIRB, relating to extensive and serious problems with the operations and management of the current Mary River Project not being addressed. A broad reconsideration of the current Project terms and conditions is necessary to consider:

⁷ WSP Golder, 2022. Draft 2021 Marine Mammal Aerial Survey Program - Technical Data Report. Prepared by Golder WSP Golder for Baffinland Iron Mines Corporation. Document No. 1663724-R-RevB-49000. 23 March 2022.

⁸ *Supra*, note 4, p. 182 and pgs. 233-234.

⁹ *Supra*, note 4, p. 203.

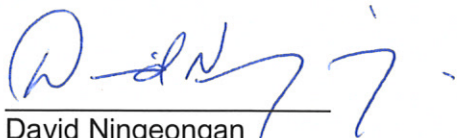
- impacts on wildlife, Inuit harvesting, culture, land use and food security;
- gaps between Baffinland's monitoring results and the observed effects and experience of the communities in respect of declining wildlife populations, environmental and socio-economic impacts;
- the lack of application of Inuit Qaujimajatuqangit to Baffinland's monitoring and mitigation measures;
- data gaps in the regional monitoring of baseline conditions hindering the development of thresholds, indicators and adaptive management actions challenging;
- lack of socio-economic monitoring information necessary to gain a better understanding of the socio-economic effects of the current Mary River Project;
- the impact of the ineffectiveness of the MEWG and Terrestrial Environmental Working Group; and
- the lack of confidence that the predictions provided by Baffinland are sufficiently reliable to address cumulative effects of the PIP Renewal with the existing Mary River Project.

5. Summary of Recommendations

NTI has stated previously that impacts from the current Mary River Project, including activities related to PIP, cannot be ignored. There is evidence collected through various processes and on the record before NIRB that there are impacts from the Mary River Project to Inuit harvesting, wildlife and the environment that are not being adequately monitored or mitigated, and that Inuit Qaujimajatuqangit is not being adequately integrated in monitoring or adaptive management responses. Inuit have indicated that there are serious impacts from dust and that marine mammals are being impacted, particularly narwhal. Although multiple factors including the project may be contributing to changes in the environment, the impact of each factor remains uncertain at this time. The most recent aerial narwhal survey shows a significant decline in numbers of narwhal in the local area. Additionally, NIRB has identified that there are data gaps in the monitoring of baseline conditions for environmental and social values that must be filled. The data gaps for marine mammals make the development of thresholds and indicators triggering adaptive management actions challenging for the Mary River Project.

Given the critical importance of healthy environment and abundant wildlife, including marine mammal populations to Inuit, these issues should be fully addressed in the reconsideration process for the PIP Renewal or through an additional reconsideration process in the event the Phase 2 Project Proposal does not proceed and appropriate amendments to terms and conditions to address current Project effects are not made.

Yours sincerely,



David Ningeongan
Chief Operating Officer