

To: Nunavut Impact Review Board                      From: Baffinland Iron Mines  
File: 08MN053 (124701)                                  Date: September 9, 2021

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**Reference: Community Engagement Update****Introduction**

The following memo provides an update to the Nunavut Impact Review Board (NIRB or the Board) on engagement activities related to the Phase 2 Proposal that have been carried out by Baffinland since the Company's previous update provided to NIRB in April 2021.

**Summary**

Baffinland would like to thank all Inuit organizations, community representatives and members of the public who have taken the time to continue to meet and discuss important issues related to the Mary River Project and the ongoing assessment of the Phase 2 Development Project proposal since April 2021 (see Table 1). Continued dialogue and discussion on issues of importance play an integral part in the overall Stakeholder Engagement Plan employed by Baffinland and will be key to maintaining dialogue on the Project well into the future.

The health and safety of Nunavummiut remains a priority for Baffinland and the Company has ensured that all engagement activities undertaken followed the most current public health advice.

Supplementary to the formal and informal community engagements listed in Table 1, Baffinland has provided regular Project-related communications through social media channels, including its "Baffinland Iron Mines" and "Baffinland Shipping" Facebook pages.

Included as Table 2 is an update on translated documents submitted to NIRB since April 2021.

**Table 1- List of Community Engagements Held since April 2021**

<b>DATE</b>	<b>MEETING</b>	<b>NOTES</b>
2021/06/02	Public Radio Show- Pond Inlet	2020 Shipping Season Wrap Up, 2021 Pre Shipping Season
2021/06/07	Public Radio Show- Clyde River	Project Update
2021/06/08	Public Radio Show- Sanirajak	Project Update
2021/06/14	Public Radio Show- Igloolik	Project Update
2021/06/14	Public Radio Show- Pond Inlet	Employment and Training

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**Table 1- List of Community Engagements Held since April 2021**

<b>DATE</b>	<b>MEETING</b>	<b>NOTES</b>
		Information Session
2021/06/17	Public Radio Show- Arctic Bay	Employment and Training Information Session
2021/06/23	Public Radio Show- Clyde River	Employment and Training Information Session
2021/06/25	Public Radio Show- Igloolik	Employment and Training Information Session
2021/06/28	Public Radio Show- Sanirajak	Employment and Training Information Session
2021/06/30	Mayor Hamlet of Pond Inlet and Hamlet Technical Advisor	Project Monitoring and Freshwater Water, Proposed Mary River Dust Audit, 2021 Narwhal Mitigation and Monitoring
2021/07/06	Acting Mayor of Igloolik	Proposed Mary River Dust Audit Update
2021/07/19	Public Radio Show- Sanirajak	Project Update
2021/07/21	Mayor of Pond Inlet and Hamlet Technical Advisor	2021 Shipping Season Update
2021/07/24	Meeting with Sanirajak Hamlet Counsellors	Updates on Repeater Tower Project, Phase 2, Ege Bay Project and COVID19 at the Mary River Project (Return to Work)
2021/07/24	Public Q and A Session- Sanirajak	Public Q and A Session at the Sanirajak Co-op
2021/07/26	Sanirajak Hamlet Council	Return to work plan, Repeater Tower Project, Community Sponsorships, Phase 2, Community Engagement Planning
2021/07/28	Meeting with the Pond Inlet Hamlet Executive Council	Update on 2021 Shipping Season, Phase 2, Community Engagement Planning
2021/07/29	Mittimatalik Hunters and Trappers Organization	Tasiuqtiit Working Group, IIBA Harvesters Enabling Program, Future engagement opportunities

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**Table 1- List of Community Engagements Held since April 2021**

DATE	MEETING	NOTES
2021/08/24	Meeting with the Pond Inlet Hamlet Executive Council	Update on Phase 2, Phase 2 Commitment List
2021/08/26	Mittimatalik Hunters and Trappers Organization	Project Certificate Conditions related to underwater sounds monitoring (underwater recorders), Mary River Project Dust Audit Update, Future engagements related to Phase 2 leading up to November 1, 2021
2021/09/08	Hamlet of Clyde River	Baffinland has a meeting scheduled with the Hamlet of Clyde River on September 9, 2021. An update will be provided to the board in a supplementary community engagement update before the planned resumption of the Phase 2 Hearing on November 1, 2021.

**Table 2- Translated documents submitted to NIRB public registry since April 2021**

Submission Date	Document Title	Public Registry Identification #
2021-04-07	BIM Cvr Ltr Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs	334437
2021-04-06	2021 Community Roundtable Presentation	334354
2021-04-22	BIMC Ltr Re Updated Engagement Summary, Commitment List and Revised Draft PC	334992
2021-04-22	BIMC Updated Engagement Summary, Commitment List and Revised Drat PC 005-AppA	334993
2021-04-22	BIMC Updated Draft List of Commitments – App B	334995
2021-04-22	BIMC Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs	334991
2021-04-22	2021 Dust Summary Report	334994
2021-06-17	Baffinland Response to Comments Re Preliminary Narwhal Monitoring	335788

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### **Qikiqtani Inuit Association**

Baffinland has continued engagement with the Qikiqtani Inuit Association (QIA) on the Phase 2 Proposal and implementation of the Inuit Certainty Agreement (ICA).

Since April 2021, Baffinland and the QIA have made progress drafting Project management plans associated with ICA Schedule 2- Adaptive Management Plan Approval with advancement of the priority plans including the Shipping and Marine Wildlife and Air Quality and Noise Abatement Management Plans. Work also continued on the review of the draft Marine Monitoring and Terrestrial Environmental Effects Monitoring Plans.

Baffinland and QIA have also advanced work related to amending the Mary River Project Inuit Impact and Benefit Agreement (IIBA) in line with the ICA, and drafting and amending of IIBA Implementation guides to support ongoing IIBA implementation.

Parties having also been keeping each other updated on progress on the following initiatives:

- to develop the “Baffinland Inuit Training Centre” in Pond Inlet. This Project is led by the QIA and its partners.
- exchange drafts of information related to the implementation of ICA Schedule 10, “Measurable Objectives”.
- QIA shared the draft Terms of Reference for the Inuit Committee with Baffinland in June 2021.

Baffinland has also been informed that the QIA continues to engage Inuit across the affected communities on the development of Inuit defined Objectives, Indicators, Thresholds, and Responses that will become part of the Adaptive Management Plan for the Project.

Engagement between QIA and Baffinland has included many informal emails, and frequent (weekly) conversations, as well as over 15 formal meetings related to the ICA and Phase 2 during this time frame.

### **Hamlet of Pond Inlet**

Baffinland has been in consistent contact with the Hamlet Council, via the Mayor of Pond Inlet, since the Phase 2 hearings were postponed in April 2021. Formal and informal meetings between the Mayor and Baffinland continue to address questions about the Phase 2 Proposal.

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At the request of the Mayor and his Council, Baffinland had drafted several memorandums on the topics of the risk of marine spills (date May 31, 2021), dust and dust management (date May 31, 2021), drinking water quality (date June 28, 2021), and responses to deferred questions following a meeting with the Hamlet Executive Council on July 28, 2021 (date August 10, 2021). The memos listed herein are attached to this update for the Board's information (Appendix A).

After the lifting of travel restrictions and the requirement for quarantine for those fully vaccinated, Baffinland staff made a trip to Pond Inlet July 27-30. Baffinland was invited to attend a meeting of the Pond Inlet Hamlet Executive Council on the afternoon of July 28, 2021, as well as a board meeting of the Mittimatalik Hunters and Trappers Organization (MHTO) the afternoon of July 29, 2021.

During the Executive Council meeting, Baffinland provided an update on the return to work for Nunavummiut at Project Sites, Phase 2, 2021 Shipping Season, and discussed additional visits to Pond Inlet for Baffinland staff. Several deferred responses to questions from Counsellors were noted and responses were provided in writing as noted in Appendix A.

At the meeting with the MHTO, Baffinland was asked to comment on the Tasiuqtiit Working Group (established in 2018), provide an update on the Harvesters Enabling Program (amount of funds spent to date), and discuss future engagement opportunities between the Company and MHTO.

Baffinland returned to Pond Inlet the week of August 23, 2021 to conduct face to face meetings with community representatives. On August 24, Baffinland met with the Mayor and Hamlet Executive Council to continue discussion which began on July 28. Baffinland provided an overview of the recent information memorandums submitted to the Council to date, see Appendix A, an overview of the Phase 2 Commitment list and those Commitments made to satisfy concerns raised by the Hamlet of Pond Inlet in their letter to Baffinland dated December 29, 2021 and as outlined in the Baffinland letter to the Board dated January 27, 2021 which is attached as Appendix B herein. Baffinland responded to questions and statements made related to the possible inappropriate discharge by a Project vessel travelling through Milne Inlet. Upon investigation by Baffinland, it was determined that in fact no inappropriate discharge by a Project vessel in fact occurred. The Executive Council and Baffinland also discussed Phase 2 Project Alternatives (rail route and shipping routes), observations of marine mammal, and fish abundance near Pond Inlet in 2021, and the Ege Bay Project near Igloolik/ Sanirajak. Both Parties agreed to further meetings in the near future.

On August 27, 2021, Baffinland was invited to attend a meeting of the MHTO Board. To begin the meeting, Baffinland was provided an update on changes to the makeup of the MHTO Board and

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introduced to the new Chair and two new Board Members. Baffinland was asked to provide an update on Project Certificate conditions that relate to underwater sound monitoring (underwater acoustic recorders), the MHTO also requested that matters related to underwater sound monitoring be added to the Agenda of the next Marine Environment Working Group Meeting. The MHTO would like to discuss a path towards the discontinuation of underwater sound monitoring due to concerns about impacts on fish and marine mammals from these programs. Baffinland provided an update on a Freshwater Fish Monitoring program that was conducted in the broader Milne Port Area, with the input of the MHTO, consistent with PC005 term and condition 48(a). The MHTO and Baffinland also discussed observations of marine mammal, and fish abundance near Pond Inlet in 2021. The MHTO stated clearly that fish and marine mammals are not in abundance this year and in similar numbers to those observed in 2020. However, it was noted that the Arctic Bay area has seen an increase in the number of Narwhal. Baffinland also provided an update on the Mary River Project Dust Audit and requested that the MHTO provide representatives that will participate in the Audit from the MHTO. MHTO Chair indicated that a meeting on September 7, 2021 has been called where nominees will be considered. To close out the meeting, the MHTO and Baffinland discussed the importance of contracting and business opportunities for individuals and organization in Pond Inlet.

**Hamlet of Sanirajak**

Baffinland staff were in Sanirajak from Friday July 23, 2021 until Tuesday July 27, 2021. The purpose of this trip was to meet with the Hall Beach Hunters and Trappers Organization (HBHTO) to discuss ongoing collaborative work to purchase, permit, and install additional radio repeater towers around the community. However, due to delayed flights and requests from officials for meetings, Baffinland staff were able to meet with 2 Hamlet Counsellors on Saturday July 24, conduct a question and answer session at the Sanirajak Co-op, and attend a meeting of the Hamlet Council on July 26, 2021. Baffinland's Community Liaison Officer in Sanirajak also conducted two separate public radio shows providing members of the public with Company updates relevant to the existing operation on June 8, 2021 and July 19, 2021. Baffinland and QIA staff also conducted an Employment and Training Session over public radio on June 28, 2021.

During the meeting with Hamlet Counsellors on July 24, Baffinland staff and two members of Council discussed the Ege Bay Project, return to work for Nunavummiut employees, Phase 2, the repeater tower project and the 2021 Shipping Season.

During the Co-op question and answer session Baffinland staff were at the Co-op from approximately 3:30pm-5:00pm and met with and heard from a total of 13 residents. Most of the questions posed to

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Baffinland (10) were about the return to work plan, and employment opportunities. 3 questions were about Phase 2 and potential for Project impacts on Communities and the environment. At the conclusion of the session, 2 names were drawn for door prizes.

On the evening of July 26, Baffinland was invited to present to the Hamlet Council on the return to work plan, and repeater tower project. After this update, Baffinland took several questions about company supports available to the community, return to work plans related to COVID19, and the repeater tower Project.

**Hamlet of Igloolik**

Baffinland was unable to make any in person visits to Igloolik over the period covered by this update. However, several radio shows were conducted to provide updates to members of the Public. The Company is currently planning for further in person engagements with the Hamlet of Igloolik, and other North Baffin Communities.

Baffinland's Community liaison officer provided a radio update relevant to the existing operation on July 14, 2021. Baffinland and QIA staff also conducted an Employment and Training Session over public radio on June 25, 2021.

Baffinland staff also had a phone call with Acting Mayor of the Hamlet Council on July 6, 2021. The Acting Mayor and Baffinland discussed the proposed Dust Audit and generally about the Phase 2 project.

**Hamlet of Clyde River**

As noted in Table 1, a meeting with the Clyde River Hamlet Council is scheduled for September 9, 2021. An update on the outcomes of this meeting will be provided to the Board in a subsequent community engagement update.

Baffinland's Community liaison officer provided a radio update relevant to the existing operation on June 11, 2021. Baffinland and QIA staff also conducted an Employment and Training Session over public radio on June 23, 2021.

**Hamlet of Arctic Bay**

Baffinland staff had planned to visit Arctic Bay on July 26-27, 2021, however due to inclement weather team members could not make the trip in person.

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Baffinland and QIA staff conducted an Employment and Training Session over public radio on June 17, 2021.

### **Conclusion**

Baffinland remains committed to engaging Inuit throughout the North Baffin Region as the Mary River Project advances. Engagements outlined in this memo build upon the extensive engagement record for the Phase 2 Proposal and Mary River Project. Baffinland is fully committed to continued sustained engagement with Communities and community representatives for the life of the Project and believes it is essential to operating the Mary River Project in an environmentally and socially responsible manner.

## APPENDIX A-1









**MEMO****Managing the Risk of Marine Spills at Mary River Project**

**For:** His Worship Joshua Arreak, Mayor, Hamlet of Pond Inlet

**By:** Sustainable Development Team, Baffinland Iron Mines

**Copy:** Pond Inlet Hamlet Council

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**INTRODUCTION**

Baffinland Iron Mines (Baffinland) understands that the Mayor of Pond Inlet and Hamlet Council are seeking greater information about the risk of marine spills and use of ship fuel types under Phase 2 for the Mary River Project.

According to Transport Canada, there is a relatively very low risk of spills in the Arctic, even when increased shipping by Baffinland is considered. The shipping route to Milne Port specifically, is well established through very deep water and the shipping window completely avoids landfast ice.

Baffinland actively manages the risk of spills by focusing on prevention and response. Highlights of these efforts are summarized below.

**LIMITING HEAVY FUEL OIL USE**

- The Government of Canada has committed to the Arctic Heavy Fuel Oil (HFO) Ban, which will be implemented starting in 2024, with exemptions allowed until 2029 for vessels that meet specific design requirements.
- Under Phase 2, ore carriers coming to Milne Port will not be allowed to use HFO within the Nunavut Settlement Area (NSA), as a mitigation against the negative environmental effects of black carbon, a powerful climate change contributor
- Baffinland has committed to this ahead of government regulations in response to Community feedback on mitigations for Phase 2. This will be implemented by Baffinland in 2022, should Phase 2 be approved in 2021.
- Baffinland is actively working with their Shipping Partners in 2021 to identify how this program can be implemented in advance of government regulations.
- To hold Baffinland accountable, we are proposing the following Term and Condition to be added to the Project Certificate to make the HFO use ban a requirement in the NSA.
- By adding this term and condition into the Nunavut Impact Review Board issued Project Certificate, the Company will be required to report publically on compliance, and members of

the public, government, and Inuit Organizations will have the ability to monitor Baffinland’s operations against this strict term and condition.

<b>Category</b>	Atmospheric
<b>Responsible Parties</b>	The Proponent
<b>Project Phase(s)</b>	Operations
<b>Objective</b>	To reduce black carbon emissions from shipping within the Nunavut Settlement Area
<b>Term or Condition</b>	<p>The Proponent shall require ore carrier vessels to use 0.1% Sulphur Marine Gas Oil (MGO; distillate fuel) while they are travelling through the Nunavut Settlement Area (12 nautical miles from shore, inclusive of the Regional Study Area).</p> <p>The Proponent may also use equivalent-performing alternatives to achieve mitigation of atmospheric black carbon emissions. An equivalent-performing alternative is a fuel that reduces black carbon emissions by at least 80% (the mitigation level provided by MGO) compared to emissions from the combustion of heavy fuel oil. Such an alternative fuel must be confirmed to achieve this standard by a consensus-based internationally recognized scientific report such as the 4th IMO Greenhouse Gas Study, Arctic Monitoring and Assessment Programme under the Arctic Council, or the United Nations Framework Convention on Climate Change.</p>
<b>Reporting Requirement</b>	An updated Standing Instructions to Masters shall be submitted to the NIRB no later than six months after the issuance of the amended Project Certificate.
<b>Stakeholder Review</b>	Hamlet of Pond Inlet, Environment and Climate Change Canada, World Wildlife Fund

## SPILL PREVENTION AT MARY RIVER

Baffinland has established procedures which are stricter than government regulations to further reduce risks associated with events that might result in an unintended release of fuel in the marine area. These measures include:

- A ship speed of 9 knots starting before the entrance to Pond Inlet to Milne port. This ship speed ensures that the risk of whale strikes is reduced and safer navigation of vessels. Baffinland monitors vessels speeds and reports this information in its annual report to the Nunavut Impact Review Board.
- No passing zones are in place around Stephens Island and Bruce Head within Milne Inlet

- Specific instructions (Standing Instructions to Masters) are provided to vessels for safe vessel operation in and out of Milne Port. This document among other things provides navigation waypoints to follow into and out of the port.
- Vessels used by the Project are selected through Rightship, which is a vetting organization that tracks and scores vessels according to their compliance with international regulations and if they have had any recent safety or environmental incidents.
- Support for additional marine mapping along the transportation corridor through the Canadian Hydrographic Society to support even safer navigation.
- Implementation of other risk mitigating tools consistent with the recommendations of Transport Canada's Tanker Safety Expert Panel (2014), including:
  - Improved Automatic Identification System (AIS) coverage of all vessels
  - Requiring vessels to obtain clearance from Northern Canada Vessel Traffic Services Zone Regulations before operating for the Project
  - Hiring experienced ice navigators
  - Requirement for all vessels to have onboard Shipboard Oil Pollution Emergency Plans
  - Conducting fuel spill modelling and risk assessments to inform emergency preparedness response plans (i.e., Baffinland's Spill at Sea Response Plan)
  - Establishment of contract with spill response company before the start of each shipping season

## SPILL RESPONSE AT MARY RIVER

Baffinland is required under the Project Certificate issued by the Nunavut Impact Review Board to maintain a Spill at Sea Response Plan, which it has since operations began in 2015. This plan is reviewed regularly, and has been updated through the Phase 2 review process based on recommendations from Transport Canada. Some key elements of this plan include:

- Baffinland is self-sufficient for emergency and spill response with capacity to escalate response for a large marine spill (up to 10,000 tonnes)
- Responses occurs under a tiered approach, depending on the severity of the spill:
  - Tier 1 – The Vessel Master and Crew implement their Shipboard Oil Pollution Emergency Plan (required by law)
  - Tier 2 – Baffinland provides assistance from the Milne Port facility through the Emergency Response Team
  - Tier 3 – A third party specialized response agency is mobilized to site (Baffinland maintains a contract with Oil Spill Response Limited for this service)
- Permanent Emergency Response Team and response equipment located at Milne Port
- Annual exercises and training carried to validate response procedures
- Representatives of local communities (including Pond Inlet) and agencies were and will continue to be invited to participate/attend field training exercises

## APPENDIX A-2















**MEMO****Dust Management Commitments at the Mary River Project**

**For:** His Worship Joshua Arreak, Mayor, Hamlet of Pond Inlet

**By:** Sustainable Development Team, Baffinland Iron Mines

**Copy:** Pond Inlet Hamlet Council

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**INTRODUCTION**

Baffinland Iron Mines (Baffinland) understands that the Mayor of Pond Inlet and Hamlet Council are seeking further information about commitments Baffinland Iron Mines (Baffinland) has made related to the ongoing and future management of dust at the Mary River Project.

This memo provides detailed information and updates related to ongoing work to implement commitments Baffinland has made related to dust management.

**BACKGROUND**

On March 10<sup>th</sup> And April 8<sup>th</sup> Baffinland provided a summary of updated commitments to resolve outstanding issues with the Phase 2 Proposal identified by the Pond Inlet Hamlet Council through our ongoing conversations. Specific to dust, the commitments we included in these letters are as follows:

1. Baffinland will develop and fund a monitoring program that is Inuit led to monitor the extent of visual dust in the Project Area as well as a snow sampling program.
2. Baffinland will triple the number of dust collectors at site.
3. Baffinland will conduct a third party major audit that will involve Inuit to identify the greatest sources of dust
  - If open truck or rail cars are found to be a significant source of dust they will be covered or sealed.
  - If the mine site primary crushing facility is found to be a significant source of dust enclosures and dust collection will be added.
  - If the current stockpile spraying is not satisfactory, covers will be added to finished stockpiles.
  - All mitigation recommendations referenced from sources identified in the audit that are contributing to higher than expected values will be implemented.
  - All other actions identified will be considered

To provide additional reassurance to the Hamlet Council that these commitments would be implemented, on April 8<sup>th</sup> Baffinland also submitted an updated Commitments List to the Nunavut

Impact Review Board (NIRB) that included the commitments outlined above. The specific wording of the commitments, as submitted to the NIRB, are included as **Appendix A** to this memo.

Baffinland also suggested, to further strengthen these commitments and the ability of Inuit to hold Baffinland accountable for delivery of them, that these commitments be added to the Mary River Project Inuit Impact and Benefit Agreement (IIBA) as updates to the Inuit Certainty Agreement. Baffinland has reiterated this commitment to the Qikiqtani Inuit Association (QIA) in writing.

## STATUS UPDATES

Below provides an update to the Hamlet Council on progress made by Baffinland to date on the commitments noted above.

**1. *Baffinland will develop and fund a monitoring program that is Inuit led to monitor the extent of visual dust in the Project Area as well as a snow sampling program***

Baffinland has been notified by the QIA that they have commenced planning for an independent Inuit led project to assess dust related to the Mary River Project. Baffinland was pleased to be informed of this project and has agreed to provide funding for it. Baffinland has also requested further details of the monitoring plan to ensure any work carried out in the Project Area is coordinated with our Health and Safety Department to ensure the safety of all Inuit monitors and Baffinland staff. Baffinland looks forward to the successful implementation of this project in 2021, and any opportunities to coordinate these activities with our own third party audit of dust sources across the existing project and the Phase 2 Proposal.

**2. *Baffinland will triple the number of dust collectors at site***

Baffinland has ordered 15 additional dust collectors and is planning for installation during the 2021 summer field season. Priority areas for placement are focused around Milne Port and the area along the Northern Transportation Corridor where the proposed North Railway would deviate from the Tote Road. Baffinland is also planning to place several dust collectors at 0.5 meters from the ground (usually set at 2 meters) based on recommendations received from community members. Final locations for the additional dust collectors will be confirmed with the Terrestrial Environment Working Group (TEWG), of which the Mittimatalik Hunters and Trappers Organization is a member. If the Hamlet of Pond Inlet would also like to be engaged on this, Baffinland would be happy to share our plans for your review and feedback. Additional dust collectors will be installed in following years, with placements informed by our ongoing monitoring, the results of the dust audit, and input from communities and the TEWG.

**3. *Baffinland will conduct a third party major audit that will involve Inuit to identify the greatest sources of dust***

Baffinland has advanced internal planning for the third party audit of sources that contribute to dust dispersion in the Project Area. Baffinland is taking the time needed to ensure that this audit is conducted in a thorough manner that is responsive to the concerns raised by Inuit. It is Baffinland's intention that this audit be conducted by a third party with input from community representatives, with an emphasis on Pond Inlet.

Baffinland is in the process of procuring the services of a third party auditor. An Advanced Contract Notification was sent to the QIA on May 27, 2021 informing of our intention to hire a contractor for the audit. Once selected, it is Baffinland's expectation that the third party auditor will engage with the Hamlet of Pond Inlet on the design and implementation of the audit.

The expected result from the audit and community engagement is to identify sources of dust across the Project, and determine the need to modify or add controls to reduce the spread of dust where it will be most effective. At this time, Baffinland is confident that the addition of wind fencing can be effective in reducing the spread of dust, especially in the Milne Port area. As a result, the objective of the dust audit for wind fencing will be to determine the locations where the fencing would be best placed.

We believe that there may also be an opportunity for the work being planned by the QIA, explained in item 1 above, to support the third party audit, and likewise our third party audit may be helpful to the QIA led project. We have requested an opportunity to review the work plan for the QIA project with the mindset to identify opportunities to ensure both parties work is successful and mutually meets their objectives and are responding to issues raised by Inuit.

Baffinland expects to be in a position to provide a more thorough update regarding the dust audit to the Hamlet Council by June 30, 2021.

## **CONCLUSION**

Baffinland appreciates the opportunity to continue to work with the Hamlet of Pond Inlet towards the resolution of outstanding issues related to the Phase 2 Proposal. The work described in this memo is a clear demonstration of the value Baffinland places on Inuit knowledge and priorities for management and development in the Mary River Project Area.

**Appendix A- Specific Commitments to the Nunavut Impact Review Board**

Baffinland will develop and fund a Community Based Monitoring (CBM) program out of Pond Inlet that is Inuit led to monitor the extent of visual dust in the Project Area as well as a snow sampling program

The CBM program could include a combination of snow coring and visual observation collection, as well as geochemical and satellite imagery analysis. Baffinland has already commenced with a pilot program that included snow sampling at multiple locations in and around the Milne Port development area, and compared the metals concentrations against Health Canada established drinking water and aesthetic guidelines. A final report on this pilot program will be shared in an information package on dust Baffinland is preparing to submit with its response to questions through the Phase 2 review. The final report will include a next steps section specific to establishing the community based component of this program, to be funded and administered by Baffinland until QIA is prepared to take over the program under the Inuit Stewardship Plan.

Baffinland will triple the number of dust collectors across the Project.

Similar to the process for locating the 6 additional dust collectors along the Tote Road in 2018 as part of the Production Increase Proposal, Baffinland will look to work with QIA and representatives from the community of Pond Inlet to determine the best locations to place additional dust collectors across the mine site, including around the quarry, ship loader and port activities at Milne Port. These stations could be established this Spring and contribute to the comprehensive audit of dust sources across the Project.

Baffinland will implement additional mitigations at Milne Port if Dustreat (stockpile spray) does not appear to reduce fugitive dust in 2021.

Performance monitoring of DusTreat applications will be evaluated using data obtained from existing dustfall monitoring programs and remote sensing of dust deposition using available satellite imagery. Should monitoring indicate that Dustreat has not been effective in reducing dust around Milne Port, Baffinland will work with QIA to investigate and agree to additional mitigation measures. These may include, but are not limited to:

- Modifications to the application process for Dustreat;
- Evaluation and implementation of alternative spray technologies/products;
- Installation of wind fencing around the Milne Port stockpiles; and
- Stockpile covers (tarp like product)

Additional mitigations for dust at Milne Port will be provided to QIA by mid-March as part of the adaptive management update to the Air Quality and Noise Abatement Management Plan, a plan selected by QIA for approval as part of the Inuit Certainty Agreement. The comprehensive audit to be initiated this year will likely add to the potential mitigations to include in our base operating plans as well as our adaptive management plans.

Baffinland will consider covering open boxes of haul trucks and/or rail cars, and enclosing the Mine Site crushers as part of the independent audit.

Should the independent dust audit indicate that covering the open boxes of ore haul trucks and/or rail cars, or enclosing the primary crushing facility at the Mine Site would lead to meaningful reductions in dust, they will be implemented. Should the outcome of the audit not require the pre-emptive application of these mitigations, they will be integrated into Baffinlands Adaptive Management Plan as response to passing moderate or high level thresholds, as agreed to with the QIA, and by extension the Inuit Committee.

Baffinland will fund an independent audit of all present and future (Phase 2) dust sources across the Project to ensure the proper dust controls are in place. This will include an evaluation of existing and proposed dust controls for the purpose of identifying where improvements or additional measures are required. To ensure the audit fully considers the knowledge and concerns of Inuit, and that Baffinland is accountable for implementing the recommendations that follow from the audit, Baffinland will seek to establish a joint Project Charter with the QIA and designated representatives from the impacted communities. The project charter will outline the audit goals, roles and responsibilities, approach to the use of IQ, major milestones, timelines, risks, etc. Any onsite inspections by the auditors will be attended by designated community representatives to provide their insights at each audit location.

## APPENDIX A-3















## MEMO

### Drinking Water and the Mary River Project

**For:** His Worship Joshua Arreak, Mayor, Hamlet of Pond Inlet

**By:** Sustainable Development Team, Baffinland Iron Mines

**Copy:** Pond Inlet Hamlet Council

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## INTRODUCTION

Baffinland Iron Mines (Baffinland) understands that the Mayor of Pond Inlet and Hamlet Council are seeking further information about freshwater or drinking water quality near the Mary River Project and the potential for Project impacts. The concerns are mainly related to iron in the ore dust released by iron ore mining at Mary River, and the impact of dust on freshwater.

This memo provides detailed information about Baffinland's monitoring of water quality across the Project areas and monitoring results seen to date.

## BACKGROUND

Baffinland monitors water quality across the Project Areas as part of routine monitoring which is required by the Nunavut Impact Review Board (NIRB), Nunavut Water Board (NWB), the Qikiqtani Inuit Association (QIA) and other agencies, such as Environment and Climate Change Canada (ECCC). In 2020 Baffinland also began a pilot program to monitor dust in snow, which in some areas could be used to make tea. This was based on community concerns regarding dust in the Milne Port area.

The attached (Appendix A), provides a graphical representation of iron concentration data in water from Project areas identified on the attached map. The data included in Appendix A is from:

- Water quality samples which are collected from 6 monitoring stations at **Camp Lake**, which is at the west side of the mine site. These samples are collected every year in winter, summer and fall. The graphics show the data from 2019 and 2020 for iron in Camp Lake water.
- Water quality samples which are collected at **Tariujaq or Sheardown Lake**, which is adjacent to the mine site. **Tariujaq** has two parts – a northwest part where there are 6 monitoring stations and a southeast part where there are 5 monitoring stations. Samples are collected every year in summer, fall and winter. The data from 2019 and 2020 for iron in the two areas of the lake are shown separately in the attached.
- Water quality samples which are collected from 8 stations along the **Tote Road**, between the Mine and Port sites. This monitoring takes place between June and September, every year. The data from all of these samples collected in 2019 and 2020 are combined in the figure in the attached.

- A **snow melt water** monitoring pilot program which collected samples near the Milne Port area at the Mittimatalik Hunter and Trappers Organization (MHTO) cabin and on the west side of Milne Inlet in December of 2020. These samples are shown separately on the figure in the attached. This pilot program will be developed further to include the areas near the Mine site and will continue with community involvement.

## HEALTH CANADA STANDARDS

The World Health Organization have calculated a limit of 2 mg/L of iron in water (Health Canada does not set a limit). Concentrations below this limit would not be associated with negative health effects. This limit is shown in purple on the graphics in the attached. The average and a reasonable maximum iron water quality concentration from each of the monitoring locations are shown on the figures in the attached as well.

The Canadian Drinking Water Quality guideline of 0.3 mg/L has been set by Health Canada as an aesthetic objective based on taste and water discoloration. Aesthetic objectives are set by Health Canada to show acceptable qualities of drinking water, such as taste, odour and colour. Health Canada has determined that at concentrations above 0.3 mg/L iron can produce an undesirable taste in drinking water and can stain laundry and plumbing fixtures. This means that the water may be safe to drink, but may have a taste or colour that individuals may not expect or want to see/taste. This limit is shown as a yellow line on the figures in Appendix A.

While there is no drinking water quality guideline for wildlife, iron does not build up through the food chain (bioaccumulation).

## MONITORING RESULTS TO DATE

The iron water quality monitoring data that we have collected shows that concentrations of iron in freshwater and sampled snow melt water **do not** exceed health-based guidelines. In the few samples with slightly higher levels of iron, there could be slight colour changes or water with a different taste. These taste and color changes are not associated with an elevated health risk. While some years of sampling have shown increased iron levels in some areas, concentrations are often similar to that measured when mining started.

For comparison to water quality samples found in the Project Area, the attached also shows iron water quality data for Pond Inlet, which also does not exceed health-based guidelines, but some samples do exceed the aesthetic guideline.

This means that the water sampled by Baffinland is similar to water found in Pond Inlet in that each area's water do not exceed health-based guidelines, but from time to time water from each area may exceed aesthetic guidelines and the water may look or taste different. Based on the data collected to date, the measured concentrations of iron would not impact health.

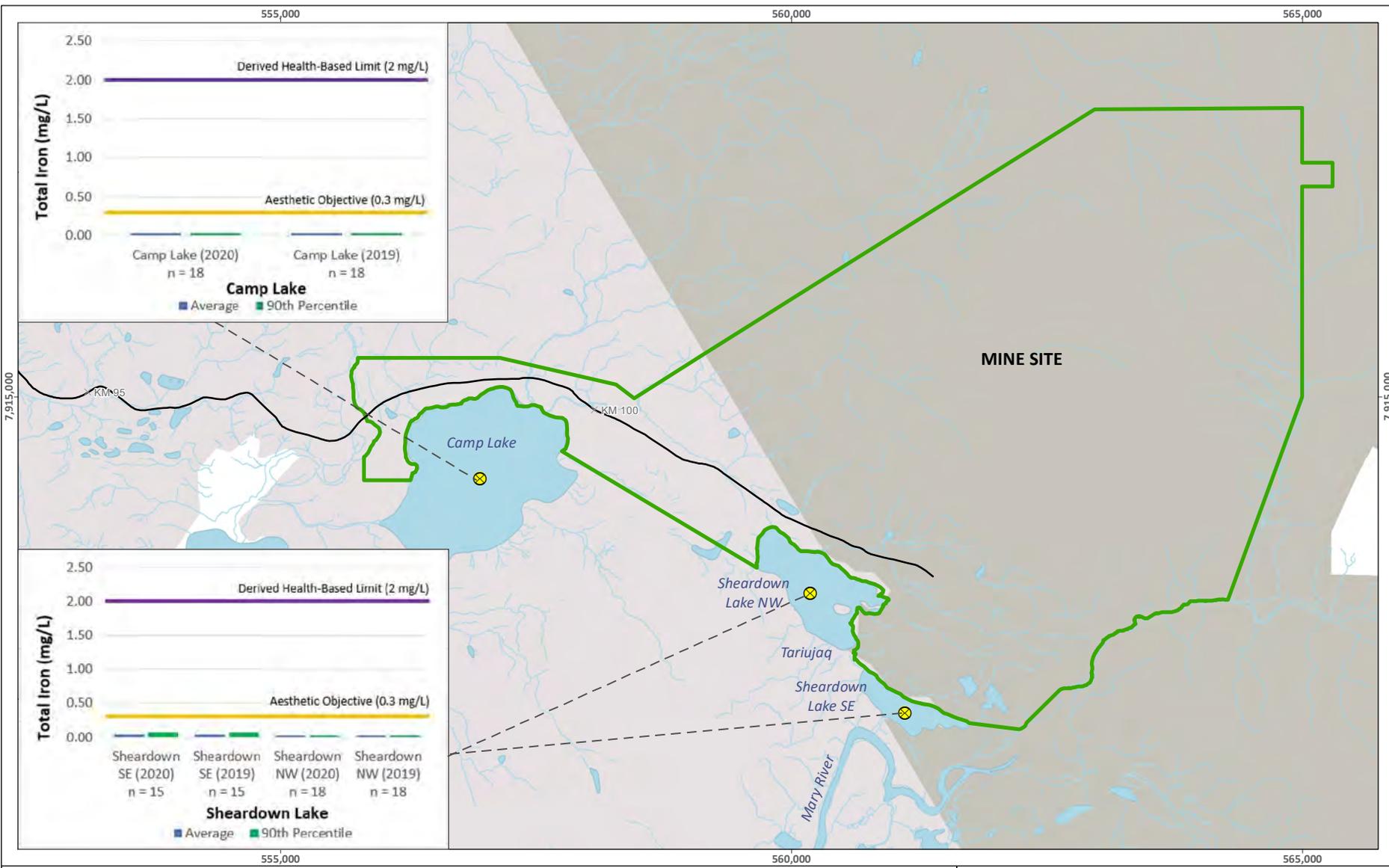
## CONCLUSION

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This data, which is publically available and thoroughly reviewed by the NIRB, NWB, QIA and other regulators shows that water at the areas sampled near the Mary River Project do not exceed health based guidelines for iron in drinking water.



SAVED: C:\Users\kalfat\OneDrive\Documents\4 - Maps\Engagement\MIEMO\02106 - Drinking Water\BIM\_Fig 1 Mine Site\_Drinking Water.mxd; 28-Jun-21



- LEGEND**
- ⊗ Sampling Area
  - Milne Inlet Tote Road
  - ▭ Project Development Area
  - ▭ IOL Surface Only
  - ▭ IOL Surface and Subsurface

Each graph displays the total iron in surface water results compared to the Canadian Drinking Water Quality Objective (0.3 mg/L) and the Derived Health-Based Limit (2 mg/L).

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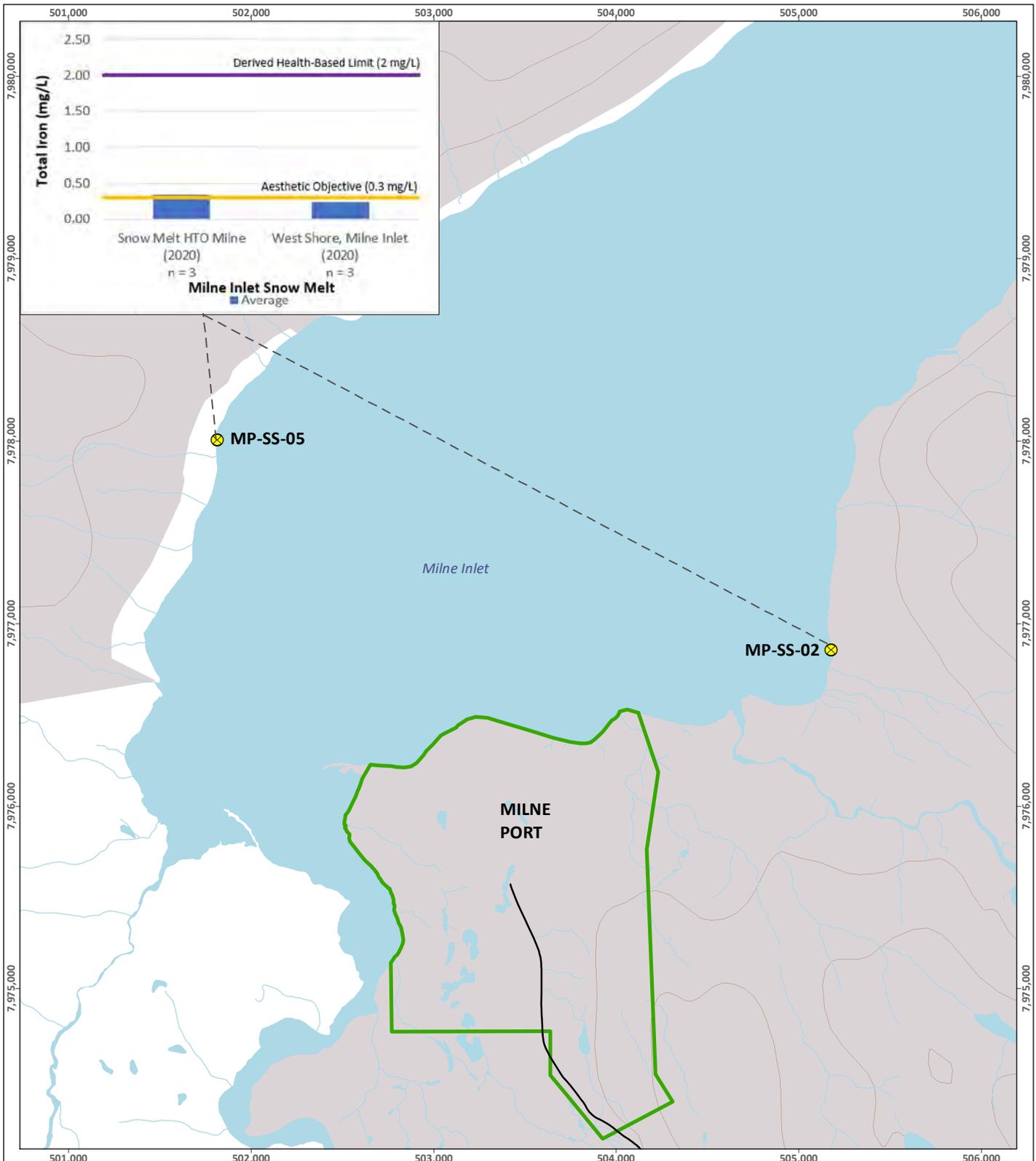
**Mine Site  
Drinking Water Quality Comparison**

Projection: NAD 1983 UTM ZONE 17N.  
Base Map: © Queen's Printer for Ontario, 2020.

0 250 500 1,000 Meters  
Scale 1:55,000

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**Baffinland** ᓄᓄᓄᓄᓄᓄᓄᓄᓄᓄᓄᓄ **FIGURE 1**



**LEGEND**

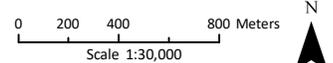
- Sampling Area
- Milne Inlet Tote Road
- Project Development Area
- IOL Surface Only
- IOL Surface and Subsurface

Each graph displays the total iron in surface water results compared to the Canadian Drinking Water Quality Objective (0.3 mg/L) and the Derived Health-Based Limit (2 mg/L).

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**Milne Port  
Drinking Water Quality Comparison**

Projection: NAD 1983 UTM ZONE 17N.  
Base Map: © Queen's Printer for Ontario, 2020.



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**FIGURE**



## APPENDIX A-4







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**MEMO****Dust Management Commitments at the Mary River Project**

**For:** Hamlet of Pond Inlet Executive Council

**By:** Sustainable Development Team, Baffinland Iron Mines

**Copy:** David Stockley, Chief Administrative Officer, Hamlet of Pond Inlet

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**INTRODUCTION**

Baffinland was invited by the Mayor of Pond Inlet to meet with the Executive Council of the Hamlet on Wednesday July 28, 2021.

Baffinland provided updates to the council on the Tasiuqtiit Working Group, Phase 2 Review Process, and upcoming plans for travel of Baffinland staff to Pond Inlet. Over the course of the meeting, several information requests were made of Baffinland. The following provided Baffinland's responses to these information requests.

**INFORMATION REQUEST RESPONSES**

**1. Councilor Joanna Innuuluk-Kunnuk requested information about sedimentation monitoring of fish due to dust falling into water bodies in the Project area**

Baffinland monitors the health of aquatic systems throughout the Project area, including water quality at crossings on the Tote Road, and a full aquatic ecosystems monitoring program at the Mine Site lakes where dust and mine activities have the greatest impact.

To date, sedimentation monitoring in mine site lakes shows levels well below our high threshold that would impact fish egg survival (1 mm of sediment accumulation), and are consistently well below the low threshold (0.15 mm of sediment accumulation) which suggests there would be no impact to fish egg survival.

We have not observed any impacts to fish populations to date in the Mine Site lakes

**2. Deputy Mayor Moses Koonark requested information from Baffinland about the material used to construct and maintain the Tote Road and conformation that "iron ore" was not used to build the road.**

The Tote Road was constructed from sand and gravel sources (borrows) along the road, and quarried rock from approved quarry locations at the Mine Site and Milne Port. Iron ore has not been used as a construction material for the Tote Road. Baffinland has as-built reports from the Bulk Sample phase of the Project (2009) which includes information about the construction of the tote road as well as information about what was used to construct the road. Should the Hamlet Council wish to receive copies of these reports, Baffinland can provide them.

**3. Councilor Joanna Innuuluk-Kunnuk requested information about any research on dust from the Project that may have been conducted Koluktoo Bay.**

Baffinland acknowledges that dust fall does occur outside of the immediate Project area. For dust to travel to Koluktoo Bay it would have to travel over hills/ mountain ranges from the Port site. Should dust travel this distance, the extent of the dust fall would be very limited, and almost certainly below detection limits. In other words, while it is possible that dust would be visible, there would likely not be enough dust to even measure the amount present. Given that, if any dust is visible near Koluktoo Bay, there would not be enough to harm fish or fish habitat. At Milne Inlet, where most of the Project dust would settle on waters, monitoring has shown that fish health has not changed since before the Project began. Baffinland does not have any research or studies that have been done about the effect of dust melting snow (i.e. albedo effect). Existing monitoring of ice presence in the study area will allow us to continue investigating ice decay and freeze up trends relative to the presence of dust.

Baffinland has observed other areas along Milne Inlet that show extensive dust fall as seen on snow in satellite imagery taken for Baffinland. This includes a rocky outcropping near Qaurnak, in between Tununiarusiq to the west, and Agliruujaak to the east. As such, dust observed on the landscape may be occurring from natural sources.

Satellite images are attached to this memorandum which show the change in dust fall affect in and around the Project area. Baffinland notes that between 2020 and 2021, significant improvements in dust fall based on the expanded mitigation on site including the use of Dust/Blokr® (previously called DustStop) on the tote road, and DustTreat to cap the stockpiles at Milne port. Baffinland is further committed to installing wind fencing at Milne Port to further reduce dust from the stockpiles as well as an independent audit of dust sources across which will include a committee of community representatives to advise on the conduct of the audit.

**4. Councillor Joshua Idlout requested information about Baffinland contracts with its vessels as it relates to the potential for financial or other fines in the event of non-compliance by a vessel.**

Baffinland investigates each event of non-compliance and in most cases there is an acceptable rationale. For example, when vessels deviate from the nominal shipping route, or exceed set speed limits, it is often a matter of navigational safety. If in the future a vessel were to commit a more major non-compliance, such as repeated speed exceedances without rationale, or an unreported release of discharge, we would consider terminating our relationship.

To date, however, this has not had to be considered. Baffinland is fortunate to work with world class shipping companies and many vessels return to the Project year over year. Returning vessels and Captains are well aware of the rules we set in the Regional Study Area, and although we issue a standard set of Instructions to Masters to all vessels prior to each shipping season, for many it is only a reminder.

Baffinland also monitors vessels travelling in the shipping corridor in real time and requests Project contracted vessels to change their behaviour if a non-compliance with Baffinland's instructions is observed. This monitoring is partially done by Shipping Monitors who are stationed in Pond Inlet over the annual shipping season. As an example of the effectiveness of Baffinland real time monitoring, and the compliance of Project contracted vessels the table in Appendix B illustrates vessel speed information

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for all Project-related vessels calling at Milne Port in 2020. A total of 72 ore carrier voyages (comprising 36 ore carrier vessels), 8 freight vessels/tanker voyages (comprising 5 vessels), 2 tugs, and 1 icebreaker called to Milne Port during the 2020 shipping season. Project vessels traveled below the 9-knot speed limit for 99.0% of their transit period. The maximum recorded travel speed for an ore carrier in 2020 was 11.9 knots. The maximum recorded speed for a freight / fuel tanker in 2020 was 9.1 knots.

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## Appendix A: Dust Emission figures

Figure A: Dust fall Imagery from Santinel-2 and Landsat Satellite

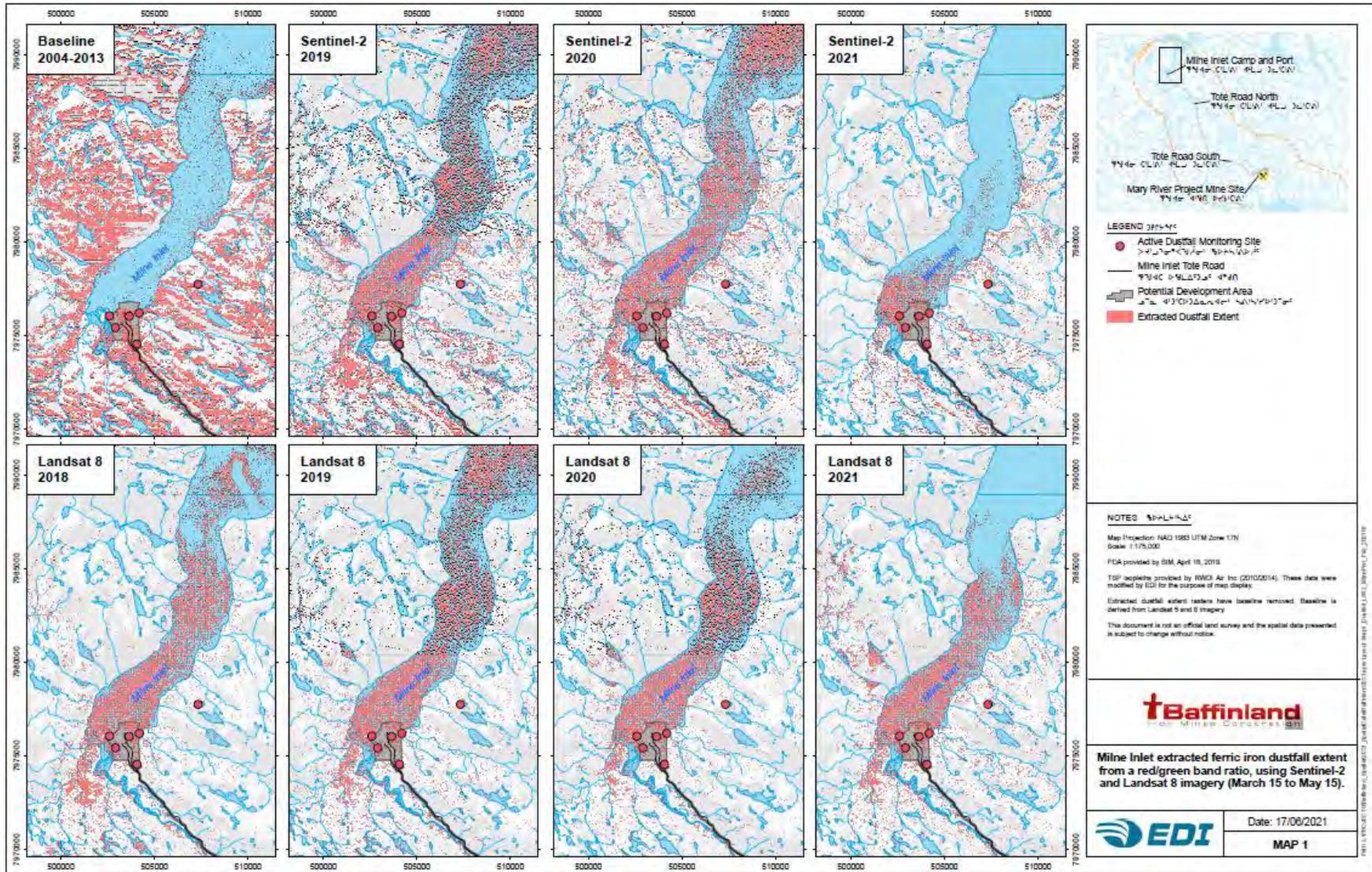
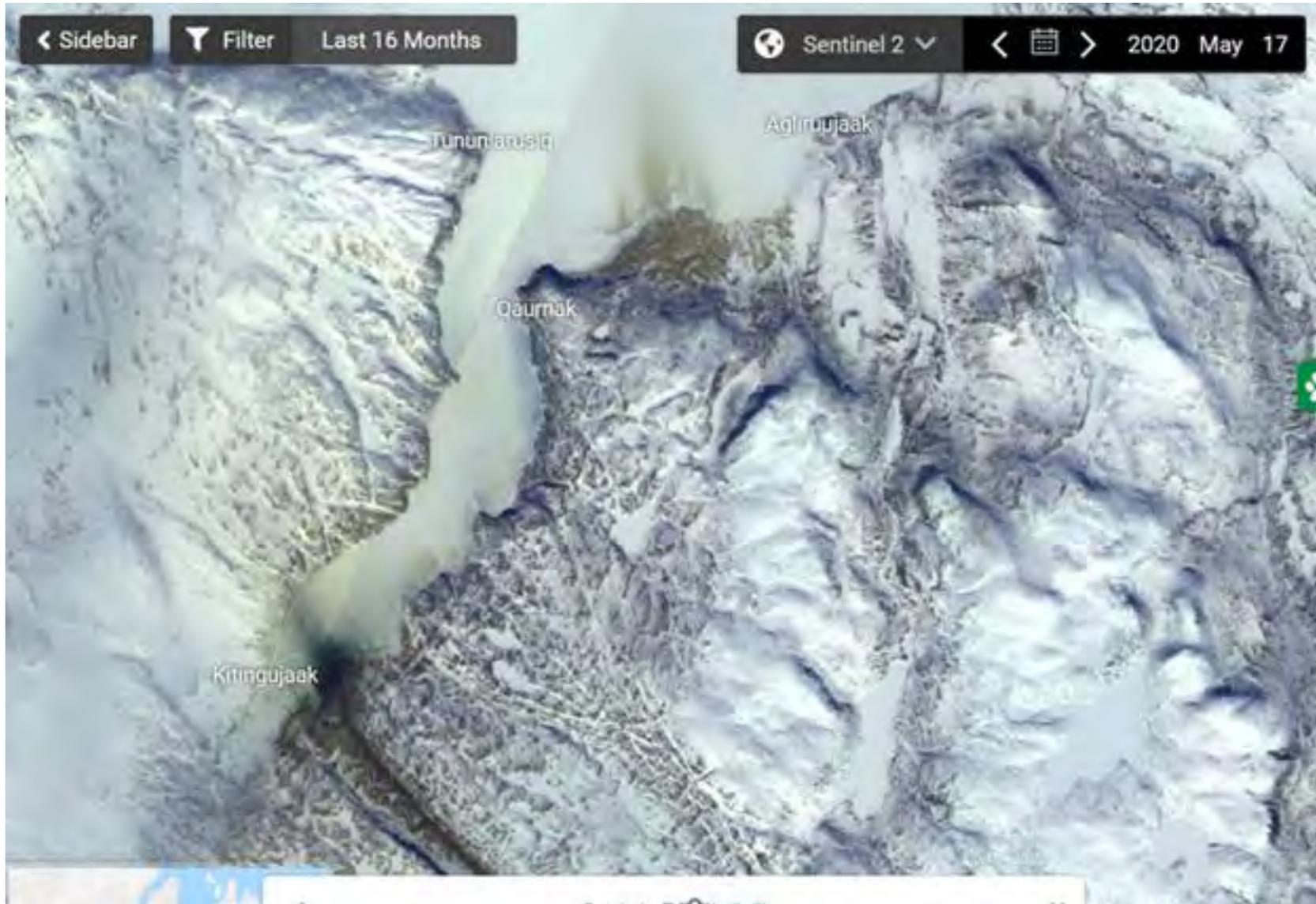


Figure B: Sentinel-2 imagery of dust fall sources in Milne Inlet



# **Appendix B: Recorded Speeds of Project Vessels transiting along Northern Shipping Route, 2020**

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Vessel Name	No. of Round Trips	Vessel Type	Max Speed	Median Speed	% of travel >9knots	% of travel >10 knots
ADMIRAL SCHMIDT	3	Ore Carrier	11.9	8.5	8.92	8.05
AM QUEBEC	1	Ore Carrier	8.8	6.7	0	0
BULK DESTINY	1	Ore Carrier	8.9	7.5	0	0
DESPINA V	1	Ore Carrier	8.9	7.3	0	0
FLAG METTE	2	Ore Carrier	9.4	8	0.06	0
GEBE OLDENDORFF	1	Ore Carrier	9.7	8.2	0.47	0
GEORG OLDENDORFF	1	Ore Carrier	9.2	8.6	0.27	0
GISELA OLDENDORFF	2	Ore Carrier	8.9	8.1	0	0
GOLDEN AMBER	1	Ore Carrier	8.8	7.6	0	0
GOLDEN BULL	2	Ore Carrier	9.5	8.4	0.39	0
GOLDEN DIAMOND	1	Ore Carrier	8.9	7.3	0	0
GOLDEN ICE	2	Ore Carrier	9.3	8.3	0.07	0
GOLDEN OPAL	2	Ore Carrier	9.6	7.6	0.76	0
GOLDEN OPPORTUNITY	2	Ore Carrier	10	7.7	0.71	0
GOLDEN ROSE	1	Ore Carrier	9.1	7	0.01	0
GOLDEN RUBY	3	Ore Carrier	9.3	8.3	0.79	0
GOLDEN SAGUENAY	2	Ore Carrier	9	7.8	0	0
KUMPULA	1	Ore Carrier	9	8	0	0
M.V. GOLDEN BRILLIANT	3	Ore Carrier	10.8	8.1	0.85	0.15
NORDIC OASIS	4	Ore Carrier	9	7.4	0	0
NORDIC ODIN	3	Ore Carrier	9.1	8.5	0.05	0
NORDIC ODYSSEY	3	Ore Carrier	9	7.8	0	0
NORDIC OLYMPIC	3	Ore Carrier	8.9	8	0	0
NORDIC ORION	3	Ore Carrier	9.2	7.8	0.07	0
NORDIC OSHIMA	3	Ore Carrier	8.9	7.7	0	0

NS ENERGY	3	Ore Carrier	9.1	7.7	0.07	0
NS YAKUTIA	3	Ore Carrier	9.5	7.9	1.54	0
PABAL	1	Ore Carrier	9	8	0	0
PABUR	2	Ore Carrier	9.4	8.3	0.51	0
RIO GRITA	1	Ore Carrier	9.1	7.7	0.61	0
RIO TAMARA	3	Ore Carrier	10.1	8.1	0.64	0.01
SAGAR SAMRAT	2	Ore Carrier	9.3	8	0.85	0
SEA EXPRESS	1	Ore Carrier	9	8.4	0	0
SEA NEPTUNE	1	Ore Carrier	9.1	7.8	0.15	0
SEA PLUTO	1	Ore Carrier	9.5	8.5	4.92	0
VITUS BERING	3	Ore Carrier	9.4	8.5	0.40	0
DARA DESGAGNES	1	Cargo/Fuel	8.8	7.9	0	0
SARAH DESGAGNES	3	Cargo/Fuel	8.9	8	0	0
CLAUDE A. DESGAGNES	1	Cargo/Fuel	8.9	7.7	0	0
MIENA DESGAGNES	1	Cargo/Fuel	9.1	8.8	0.42	0
TAIGA DESGAGNES	2	Cargo/Fuel	9	7.2	0	0
MSV BOTNICA	Escort vessel	Ice Breaker	9.3	7.7	0.05	0
OCEAN RAYNALD T	1	Tug	12.7	2.5	2.18	0.42
OCEAN TAIGA	1	Tug	12.6	2.7	1.48	0.33

## APPENDIX B



January 27, 2021

Karen Costello  
Executive Director  
Nunavut Impact Review Board  
29 Mitik Street  
PO Box 1360  
Cambridge Bay, NU X0B 0C0

Sent via [info@nirb.ca](mailto:info@nirb.ca)

**Re: Baffinland Response to Hamlet of Pond Inlet (Mittimatalik) Announcement with regard to Support for Baffinland Iron Mines Corporation Phase 2 Expansion of the Mary River Project**

On December 29 2020, Baffinland received notice of the Announcement “the Announcement” from the Hamlet of Pond Inlet which outlined conditional support for Baffinland Iron Mines Corporation (Baffinland) Phase 2 Expansion Proposal (Phase 2) for the Mary River Project (the Project).

Baffinland respectfully submits to the Nunavut Impact Review Board (NIRB) a copy of its January 13 2021 response (“the Letter”) that was provided to the Hamlet of Pond Inlet (Attachment 1), and details on alternate proposals put forward by Baffinland to the Hamlet of Pond Inlet since the Letter was provided (Attachment 2 and 3).

For context, a summary of the recommendations made in the Announcement and Baffinland’s response to these is provided below.

1. **The Hamlet of Pond Inlet recommended that Baffinland adopt a phased approach, with yearly increments of 1.5 Million Tonnes Per Annum (MTPA) of iron ore.**
  - In Appendix A of the Letter, Baffinland proposed an alternate schedule, which included a more modest ramp up than that suggested by the Hamlet (up to 7.5 MTPA) during the construction phase of the Phase 2 Project. It also suggested verifying the results of monitoring programs during the construction period against established adaptive management indicators and thresholds before increasing to the full 176 vessel transportation rate, or to quickly scale back if necessary. No option for a gradual increase after full construction has been completed was put forward by Baffinland on January 13, 2020.
2. **The Hamlet of Pond Inlet recommended the Phase 2 proposal only be approved to proceed if Baffinland commits to increase the number of Inuit employees within its workforce by 2.6% each year in the first four years of the Phase 2 Project.**

- In Appendix B to the Letter, Baffinland provided an overview of the process for establishing annual Minimum Inuit Employment Goals (MIEG's) as outlined in the existing Inuit Impact and Benefit Agreement (IIBA). It is important to note that the value referenced by the Hamlet of Pond Inlet (25% MIEG) is an outdated target value as per the 2018 IIBA. The response also highlighted improvements to this process as introduced through commitments under the Inuit Certainty Agreement (ICA) as they relate to penalties if MIEG's are not achieved.
3. **The Hamlet of Pond Inlet recommended that the start of the shipping window for the Phase 2 Project be limited to a period in which landfast ice has dissipated along the shipping corridor for two weeks. Further the Hamlet of Pond Inlet recommended that the annual shipping period for the Project be determined by the Mittimatalik Hunter and Trappers Organization (MHTO).**
- In Appendix C of the Letter, Baffinland outlines its minimum requirements for the length of its shipping season and the limitations on chartering larger vessels. An alternative set of restrictions on shoulder season shipping are proposed, which include extending the ice breaking transit restriction mitigation in the spring shoulder seasons as long as ice conditions required it, implementing ice breaking transit restrictions in the fall shoulder season, and planning to complete the shipping season by October 31 of each year; relying only on the first 2 weeks of November as a contingency, only if ice conditions allow for it (i.e. no land fast ice is present along the shipping route).

Following the submission of the January 13, 2021 Letter, Baffinland continued to investigate alternative or additional conditions for consideration by the Hamlet of Pond Inlet. Subsequent to these discussions, on January 22 and 23, 2021 Baffinland issued two documents to the Hamlet of Pond Inlet that provide additional or modified proposals for a gradual increase in shipping activities for Phase 2 (Attachment 2) and conditions for the start of the shipping season (Attachment 3).

Baffinland's Commitments for consideration included within these proposals are as follows.

### **Commitments for a Progressive Shipping Approach**

To provide greater certainty regarding potential Project effects and the need for additional mitigations and adaptive management measures, Baffinland will be required to initiate a gradual increase to shipping activities via simulated transits during the construction period. Specifically, this includes:

- Increasing shipping activities in 3 stages (see Table 1 of Attachment 3), roughly 30 vessels at a time, over a period of 5 years;
- Chartering additional vessels in 2022 and 2023 to simulate the incremental increases in shipping activities;
- Evaluation of monitoring results against agreed upon thresholds for at least two-years at each stage;

- Planning for additional mitigation measures or activities in advance of increasing to the next stage; and
- Constraining shipping activities in 2024 and 2025 below what would otherwise be possible

At the completion of each stage, if monitoring programs **have not** demonstrated the exceedance of predetermined thresholds, Baffinland will increase the number of vessels coming to Milne Port. If monitoring programs **have** demonstrated exceedances of predetermined thresholds, then the Hamlet of Pond Inlet, through the Inuit Committee, would be part of the process to determine the most appropriate response, which could include 1) maintain the shipping levels at any given stage, 2) increasing shipping with additional mitigations expected to address the effects, or 3) to reduce shipping and production if the circumstances require it.

Full details of this alternate proposal, including a proposed schedule, are included in Attachment 2.

### **Commitments for the Start of the Shipping Season**

To avoid potential encounters between community members from Pond Inlet using the sea ice around the community and beginning season shipping activities, the following will be required each year prior to the commencement of shipping:

- Baffinland provide daily updates to the Hamlet and MHTO starting upon first arrival of vessels in Baffin Bay;
- Baffinland requests confirmation from the MHTO that the floe edge is no longer being used for hunting;
- MHTO provides confirmation the floe edge is no longer being used for hunting
- Baffinland issues a notice to the Hamlet and MHTO at least 72 hours before Baffinland expects landfast ice to be broken along the entire shipping route; through the notice Baffinland initiates a communication protocol to understand how the ice is being used around Pond Inlet in any given year.
- The community and Baffinland develop a protocol to implement in years where sea ice is being used by the community at the same time Baffinland conditions to commence shipping have been met.

Under the proposed system outlined above, Baffinland will not commence shipping before 1) landfast ice has broken along the entire shipping route, 2) the MHTO has confirmed the floe edge is no longer being used by hunters, and 3) Baffinland Shipping Monitors, in consultation with the Hamlet and MHTO, have confirmed how the ice around Pond Inlet is being used by the community.

Full details of this alternate proposal are included in Attachment 3.

The alternate proposals serve to achieve the overarching objectives of the recommended conditions for the Phase 2 Project put forward by the Hamlet of Pond Inlet and emphasize Baffinland's desire to find mutually agreeable compromises while maintaining the financial viability of the Project.

Best regards,



Megan Lord-Hoyle

Vice President, Sustainable Development

cc: Joshua Arreak, Mayor – Hamlet of Pond Inlet  
Jerry Natanine, Mayor – Hamlet of Clyde River  
Merlyn Recinos, Mayor – Hamlet of Igloolik  
Jaypeetee Audlakiak, Mayor – Hamlet of Sanirajak  
Moses Oyukuluk, Mayor – Hamlet of Arctic Bay  
Eric Ootoovak, Chair – Mittimatalik Hunters and Trappers Organization  
Apuise Apak, Chair – Clyde River Hunters and Trappers Organization  
David Irngaut, Chair – Igloolik Hunter and Trappers Organization  
Jopie Kaerner, Chair, Sanirajak Hunter and Trappers Organization  
Moses Koonoo, Chair – Arctic Bay Hunter and Trappers Organization  
Frank Tester, Technical Advisor – Hamlet of Pond Inlet  
PJ Akeeagok, Stephen Williamson Bathory, Jared Ottenhof – Qikiqtani Inuit Association  
Lisa Dyer – Government of Canada  
Natalie O’Grady – Government of Nunavut  
Udlu Hanson, Joseph Tigullaraq, Lou Kamermans, Andrew Moore - Baffinland Iron Mines Corporation

*Attachment 1 – Baffinland January 13 2021 Response to the Hamlet of Pond Inlet Announcement of Condition Support for the Phase 2 Project*

*Attachment 2 – Baffinland January 22 2021 Memo to Hamlet of Pond Inlet Re. Updated Proposal Re. Progressive Shipping Increases*

*Attachment 3 – Baffinland January 23 2021 Memo to Hamlet of Pond Inlet Re. Spring Ice-Breaking and Start of Season Proposal*

## **Attachment 1**

Baffinland January 13 2021 Response to the Hamlet of Pond Inlet  
Announcement of Condition Support for the Phase 2 Project



January 13, 2021

Mayor Joshua Arreak  
Hamlet of Pond Inlet  
Pond Inlet, NU  
[Mayor@pondinlet.ca](mailto:Mayor@pondinlet.ca)

**RE: Announcement: Hamlet of Pond Inlet (Mittimatalik) with regard to Support for Baffinland Iron Mines Corporation Phase 2 Expansion of its Mary River Mine**

Dear Your Worship,

Thank you for your announcement outlining the conditional support for the Project and the Inuit Certainty Agreement (ICA). It is noted that the Hamlet of Pond Inlet has put forward three conditions which they are asking Baffinland to commit to in order to secure Pond Inlets support for the Phase 2 proposal. Baffinland appreciates the proposal put forward by the Hamlet of Pond Inlet and their willingness to continue working with Baffinland to find a suitable path forward for the development of the Phase 2 proposal. Baffinland is committed to working with the Hamlet of Pond Inlet to finding ways to adapt the operation to the suitability of Pond Inlet, and has carefully considered what has been proposed.

Baffinland respectfully submits the enclosed responses to the Hamlet of Pond Inlet, with an emphasis on finding mutually agreeably compromises that respect the limitations of what can be achieved to support a viable and successful project. Associated technical details have been attached as appendices.

We look forward to continuing these discussions and hope that the Hamlet will find these answers satisfactory to allow further dialogue.

- 1. The Hamlet of Pond Inlet will not support the Phase 2 Project unless Baffinland agrees to a proposal to 'phase in' the shipment of 12 million tonnes of ore per year, in yearly increments of 1.5 million tonnes per year.***

This condition inherently presents two scenarios: 1) a gradual increase of 1.5 million tonnes per year over four years from the Project approval year; or 2) a gradual increase of 1.5 million tonnes per year over four years from full construction of the proposed Phase 2 railway. It is not clear when this condition was meant to take place in the letter from the Hamlet so both scenarios have been considered and responded to. The proposal to gradually increase production is complex and Baffinlands response has prioritized clarifying the difficulties with achieving the request of the Hamlet, as proposed, and presenting an alternative proposal.

To be financially stable, producing and transporting more than the current limits requires additional infrastructure in the form of a railway and second ore dock. There are technical limitations associated with achieving a more significant tonnage under the trucking operation and it is not possible to get the financing required to build the railway and second ore dock unless the approved project can demonstrate certainty on the profitability and timelines for return on investment. The feasibility of

Phase 2 is assessed on its full capacity to use 176 ore carriers and operate a year-round railway system as soon as construction is complete. Placing constraints on the operations ability to take advantage of the full capacity available to it for an extended period of time is not a business model investors will find acceptable.

In short, although Baffinland would benefit from the ability to truck, ship and sell more than the 6 Mtpa during the construction of the railway, the proposal as put forward is not a practical solution to the gradual ramp up option. Baffinland has proposed an alternate schedule for the Hamlets consideration which includes a more modest ramp up during construction as well as additional commitments to the Adaptive Management Plan. A more complete analysis of the Hamlet of Pond Inlets proposal is provided in Appendix A.

### **Incremental Production Counter-Proposal including Adaptive Management**

Baffinlands understands the value in a phased approach to development, and if there is a desire to see a ramp up during the additional permitting and construction period (approximate 3-year period), Baffinland may be able to modestly increase production and transportation capacity with existing infrastructure and equipment while maintaining its commitments to environmental management and community well-being. There are two potential options in particular we could examine further:

1. Allow Baffinland to truck and ship up to 6.5 Mtpa for the duration of the additional permitting and construction period (approximately 3 years). This could require up to 7 more vessels (14 one way transits) than the current schedule each year; for clarity this would be approximately 90 vessels (180 one way transits) total per season for three seasons.
2. Allow Baffinland to truck up to 6.5 Mtpa for the duration of the construction period, stockpiling each year's additional amount until the third year when up to 1.5 Mt (culmination of trucking additional .5 Mt for three years) would be shipped in a single season (total of up to 7.5 Mt). This timeline is proposed to coincide with the construction of the second ore dock which would increase capability to ship more in a single shipping season. This could require up to approximately 21 more vessels (42 one way transits) than the current schedule or approximately 104 vessels (208 one way transits) total in that year. This allows for an additional two years at the current shipping schedule (approximately 80-85 vessels) and one year at a more significant level (approximately 104 vessels) before moving into the full Phase 2 operation (maximum of 176 vessels).

Both options above present unique operating challenges, and would require the company to break records in transportation while Phase 2 construction is occurring at the same time. Trucking above 6 Mtpa was also an issue during the Phase 2 review, resulting in the removal of a previous proposal to haul up to 12 Mtpa to a midway point between the mine and Milne Port to allow earlier commissioning of the North Railway. These are challenges Baffinland is prepared to manage, but they should be understood. A more complete analysis of these options is provided in Appendix A.

### ***Adaptive Management Proposal***

Baffinland has agreed to a precedent setting framework for adaptive management, not only in terms of its tiered and precautionary approach, but its empowerment of communities to be part of the decision making process that sets the thresholds and responses. Inuit will also be directly responsible for

monitoring the components of the environment most important to them through the Inuit Stewardship Plan which feeds into the Adaptive Management Plan that the company is bound by.

Adaptive management at Mary River will follow a tiered approach that requires the establishment of low, moderate and high risk threshold levels that will link to predetermined sets of responses. When monitoring demonstrates that these thresholds are approached or passed the corresponding suite of actions will be implemented which can and does include different levels of action up to ceasing an activity.

Baffinland suggests there is an approach to adaptive management that builds on and strengthens the existing framework in an area of critical importance to Pond Inlet. Baffinland has already proposed the initial indicators, thresholds and responses for the Marine Monitoring Program it believes can be successfully enforced at the project for the protection of the marine environment. But the Adaptive Management Plan will not be finalized until the Inuit Committee has provided direction on thresholds and responses for inclusion in the final plan which will require QIAs approval.

Baffinland proposes that special provisions be added to the Marine Monitoring Plan to account for the period between a NIRB approval and the first year following construction completion.

1. **Construction Period** - In this time period (approximately 3 years), Baffinland proposes that should the marine monitoring programs demonstrate that a high risk level threshold is met, an appropriate adaptive response would be to freeze shipping levels until the effect is demonstrated to be mitigated, at which point additional shipping could be re-introduced at a more gradual rate.
2. **Full Operation** - If in the first year of 12 Mtpa production and transportation a moderate or high level threshold is met, Baffinland would take a precautionary approach to the implementation of corresponding mitigations, including a reduction in shipping levels, until the effect is demonstrated to be mitigated, at which point additional shipping could be re-introduced at a more gradual rate.

Combined these two conditions provide the certainty that 1) operations will not ramp up unless it's been demonstrated that the current shipping levels are not having unanticipated effects on the environment or Inuit, and 2) when operations do increase, there is a path to scale down the operation after a single season if necessary.

Further to the above, if the low risk threshold(s) are passed at any time during the construction or operation period, Baffinland and QIA, with the direction of the Inuit Committee, will carry out a thorough investigation to understand the source of the effect and prepare mitigations to implement if the moderate or high risk thresholds are passed in the future. Setting low risk thresholds is a precautionary approach that provides a warning that something may be occurring that requires a better understanding, without indicating a risk level that requires the modification of the project. Modifying the project at low risk thresholds would actually prevent the possibility of understanding the effect, which may or may not be linked to the project.

It should be noted, that based on the current construction schedule it is possible that the company will have the capability to ship the expected 176 vessels during the first shipping season (currently expected as 2024). However, there are a number of factors that play into this including timeline shifts in

permitting and construction as well as operational challenges and learnings. For example, it took the company three years to take advantage of the full capacity of the Early Revenue Phase. When the company has the capacity to reach full transportation limits, it requires the guarantee that it is able to do so, but has also made commitments to an Adaptive Management Process that will provide checks and balances throughout the life of the project.

The Company would commit to informing the community annually on the expected capabilities of the year, updates on the construction schedule and would review all information provided by the Inuit Stewardship Plan to inform Baffinlands adaptive management practices.

***2. The Hamlet of Pond Inlet will only support the Phase 2 Proposal if Baffinland makes a firm commitment to increase the percentage of Inuit labour in its operations, as a percentage of the total workforce, by 2.6% per year, in each of the 4 years of an incremental increase in production.***

Baffinland agrees in principle to the concept of the Hamlets request but offers some clarification on how Inuit employment goals are currently established and highlights the emphasis on accountability that has been more recently committed to. Baffinland believes that learnings from past experience, combined with guidance from the Qikiqtani Inuit Association (QIA) and the commitments made to a penalty based system, means that the existing framework meets the intent of the Hamlets proposal.

In 2018, Baffinland and the QIA renegotiated and amended the Mary River Project Inuit Impact and Benefit Agreement (IIBA). As a result, Baffinland and the QIA agreed to establish a new process for forming Inuit employment goals by five distinct employment skills levels (Unskilled, Semi-Skilled, Skilled, Professional, Management). Inuit employment goals are set annually by Baffinland and the QIA against these employment skill levels. As such, there is not a single “25%” Inuit employment goal at the Mary River Project. Baffinland’s goal remains to maximize Inuit employment across all positions and overall at the Project. Past learnings have demonstrated that time is needed to evaluate these goals and this concept has been reflected in the more recent negotiations resulting in agreement to set employment goals every three years.

Baffinland has also committed to extensive accountability for the failure to achieve Inuit employment goals. As committed to in Schedule 10 and 11 of the Inuit Certainty Agreement, Baffinland will be held accountable for failure to achieve Measurable Objectives and Multi-Year Inuit Employment Goals, resulting in financial penalties payable to QIA and directed towards the Community Benefit Fund to compensate for lost benefit that would have otherwise been provided.

Through the amended IIBA and extensive financial investments in Inuit training from Baffinland, Inuit employment has steadily risen at the Project between 2016 and 2019 and is a trend we wish to continue to see.

A more detailed response is attached as Appendix B to this letter.

**3. *The Hamlet of Pond Inlet will not support the Phase 2 Project, unless there is a clear and consistent agreement reached that there will be no ice breaking in Milne Inlet or Eclipse Sound for a period of two weeks after ice is no longer land- fast. Thereafter, the Hamlet recognizes and supports the right of the MHTO control a decision as to when icebreaking may commence.***

Baffinland understands the importance of ice to both Inuit and wildlife and believes there is opportunity to build on the strong mitigations already put forward as part of the Phase 2 Proposal. Since 2019 Baffinland has implemented a two stage transit restriction system on any vessels coming to Milne Port during July based on ice concentrations. The purpose is to guarantee a minimum amount of “quiet time” each day for marine mammals based on the amount of time icebreaking is expected to occur in a given transit while maintaining the ability to take advantage of years where there are heavier ice conditions.

Based on 23 years of ice data, the Hamlet of Pond Inlets proposal effectively amounts to a request to ship during the open water season only (which is approximately 44 - 93 days based on that data). Limiting the shipping season to that small and variable of a time period does not provide a reasonable opportunity for Baffinland to ship the quantities or ore it needs to make the project feasible. The use of larger vessels over a shorter time period, although attractive in principle, is not a viable option that can be relied on at this time because there are not enough larger vessels available to be contracted allowing this to be considered. To reduce the shipping season to the open water period only, the average and expected losses to the number of vessels which would be able to come to site are in fact significant and threaten the viability of the Project. A supporting technical analysis of the proposal is attached as Appendix C to this letter, which provides insight into our minimum shipping requirements, and the challenges of relying on larger vessels to support a shorter shipping season.

**Ice-breaking Counter-Proposal**

As an alternative proposal Baffinland is considering modifying the current transit restrictions as a means to limit the movement of vessels in heavier ice conditions. Further, Baffinland has previously proposed to plan for the end of the shipping season by Oct 31 to the MHTO and is committed to that offer. This in no way retracts from the commitments Baffinland has made to the community about not shipping until landfast ice has broken along the shipping route or confirmation that the floe edge is closed for hunting.

Baffinland is confident that transit restrictions are an effective tool for reducing disturbance to narwhal and other marine mammals, and as such, is proposing to expand the system in the Spring and into the Fall when ice is present. The following is Baffinlands alternative proposal for shipping through ice.

- Baffinland will extend the application of the transit restrictions beyond July 31 to as long as they are required based on ice concentrations along the shipping route. That is transit restrictions will be in place from the start of shipping after landfast ice has broken until ice less than 3/10 thickness is present.
- Baffinland will plan to complete each shipping season by October 31 each year, and only ship past that date as a matter of contingency if ice conditions allow; No shipping will occur past November 15 or once landfast ice has formed along the shipping route, whichever is earlier
- Baffinland will apply a modified one-stage transit restriction system in the Fall, based on the stages of ice development (i.e. ice thickness), which is consistent with IQ received relating to the commencement of Inuit use of sea ice in Ukiaksaq (October to Mid-November)

This proposal is in addition to all other commitments currently on the record in relation to icebreaking, which include a combination of environmental and land use consideration. A complete list is attached in Appendix C to this letter.

Thank you for your continued commitment to work with Baffinland to resolve the communities concerns in relation to the Phase 2 Proposal. Baffinland has carefully considered your proposals and has provided meaningful responses that aim to strike a compromise between what will allow us to develop Phase 2 while respecting the priorities of the community of Pond Inlet.

Sincerely,



Megan Lord-Hoyle  
Vice President, Sustainable Development

c.c. Stephen Williamson-Bathory, Qikiqtani Inuit Association  
Jared Ottenhof, Qikiqtani Inuit Association  
Frank Tester, Technical Adviser to the Hamlet of Pond Inlet  
Lou Kamermans, Senior Director, Sustainable Development, Baffinland  
Udlu Hanson, Vice President Community Strategic Development, Baffinland

## Appendix A

### Statement #1 – Detailed Response

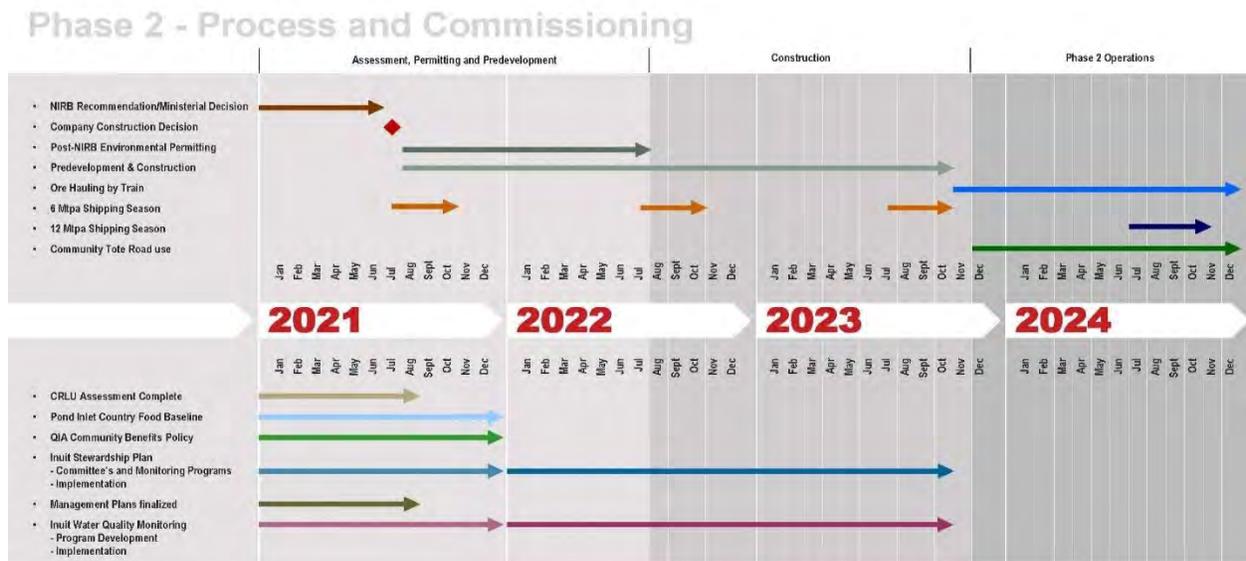
The proposal to gradually increase production is complex and Baffinlands response has prioritized clarifying the currently expected permitting and construction schedule for Phase 2, the difficulties with placing additional constraints on operations, and alternative proposals that consider what is possible using available infrastructure and equipment during the construction period, supported by a strong adaptive management system.

#### *Anticipated Development Timeline*

Should Phase 2 be approved by the NIRB and federal Ministers, construction on key infrastructure cannot begin until additional environmental permits are acquired. Additional environmental permits require additional consultation, and will incorporate the views and concerns of Pond Inlet and other North Baffin communities before they're issued:

- NWB Amended Water License will include several opportunities for Inuit to provide their input, including oral participation in technical meetings, pre-hearing conferences, and a public hearing; there will also be an additional written comment period.
- DFO Fisheries Authorizations for the second ore dock and railway will require consultation with all 5 North Baffin communities on offsetting strategies and contingency planning
- The Canadian Transportation Agencies Approval to Construct a Railway will include a written public review period where any organization can write in their concerns for consideration

Additional environmental permits will take up to a year from the issuance of an amended Project Certificate to acquire, on present schedule this would take until mid-2022. Construction is not anticipated to be complete before the end of 2023, meaning Pond Inlet would not see ore hauling by rail or shipping over 6Mtpa until 2024.



#### ICA Milestone

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Baffinland has already taken a phased approach to the development of the Mary River Project, starting with the Early Revenue Phase (2015-2017), transitioning to the Production Increase Proposal (2018-2023), and now the Phase 2 Proposal (2024-TBD). The NIRB Reviews of the Production Increase Proposal and the Phase 2 Proposal have been supported by available monitoring information from previous project phases, which has shown the effectiveness of environmental management, and the integrity of previous assessments. The Phase 2 Proposal will be subject to the strongest and most integrated approach to adaptive management in Nunavut, if not Canada, with Inuit agreeing to monitoring indicators and thresholds that will hold us accountable for implementing serious actions should we pass them

#### *Feasibility of Hamlet of Pond Inlet Proposal*

This condition presents two scenarios: 1) a gradual increase of 1.5 million tonnes per year over four years from the Project approval year or 2) a gradual increase of 1.5 million tonnes per year over four years from full construction of the proposed Phase 2 railway. It is not clear when this condition was meant to take place in the letter from the Hamlet so both scenarios have been considered and responded to below.

#### Scenario 1: Gradual Increase Starting in Project Approval Year

It should be noted that during the years of construction of the North Railway, Baffinland will continue as a trucking operation using the Tote Road. An objective of the Phase 2 proposal is to move away from a trucking operation to increase efficiencies of the operation, lower costs and reduce the environmental impacts and community concerns related to increased dust levels along the Tote Road. It should also be noted that as part of the Phase 2 review, Baffinland has committed to the MHTO that it would not truck more than 6 million tonnes of ore per year while the rail line is being commissioned.

If we examine a scenario where increased trucking above 6Mtpa along the Tote Road were permitted it would require additional investments in new and existing ore haul trucks and other equipment, and would in all likelihood increase dust levels above what we have seen today. Given that this investment would only support a temporary activity that is intended to be discontinued is difficult to justify from a financing perspective.

Baffinland also has concerns with its capacity to increase ore trucking much past the current 6Mtpa limits. Although it is likely under very favorable conditions (good weather years and minimal equipment failures) that the ability to truck more than 6MT exists on the current fleet of trucks, it is unlikely that that limit would be significantly expanded to 1.5 million or even 4.5 million more tonnes by truck (as envisioned under the Hamlets proposal). This capacity will be even further challenged by the fact that there will be substantial construction activity along the Tote Road while the railway is being commissioned and may hinder the operational capacity even at the current allowable limits. Further, a second ore dock has been included in the Phase 2 proposal as a means to increase ore shipping while not significantly extending the shipping season. The second ore dock is expected to be finished construction by the third summer after Project approval, which means there are additional constraints to taking advantage of the increased ore movement as the Hamlet has proposed until that ore dock is available.

In short, although Baffinland would benefit from the ability to truck, ship and sell more than the 6 Mtpa during the construction of the railway, it is not a practical solution to the gradual ramp up option.

Scenario 1 is not desirable because of:

- Increased dust associated with increased trucking rates; and
- Limited operational ability to move significantly more than 6MT while construction of the railway and second ore dock is underway; and
- The financial investment required to maintain and purchase equipment with no return on the investment (even with the potential increased sales revenue)

#### Scenario 2: Gradual Increase Starting after Rail Commissioning

It is expected that the rail line will be fully constructed within three years of project approval. As a result, the first shipping season, which could have the ability to see an increased to 176 vessels is not expected before the fourth summer following project approval. In theory, this construction schedule supports Scenario 1 above if it were not for the limitations on the trucking and shipping operations while under construction.

Although technically feasible to slowly ramp up production following full construction this is simply not a feasible investment opportunity. Under the scenario proposed the production schedule as envisioned would not be achieved until 7 years following project approval (3 years of construction and 4 years of ramp-up). This would mean that additional investment in the existing operation as well as investment in the infrastructure and construction of the rail project would be required 7 years prior to when Baffinland could be in a position to provide expected returns on investments. In this time period, interest would continue to accrue and significantly increase costs. Following an already extended application and review period, this is not a development option that will attract the investment required to support a positive construction decision should the Project be approved.

It should also be noted that although potentially offset by the community's desire for a phased approach, any delays in the full revenue of the project will also delay full royalty payments to Inuit through the Qikiqtani Inuit Association (QIA) and Nunavut Tunngavik Inc. (NTI) and may inhibit the Company's ability to fully fund community development projects as envisioned under the ICA.

Scenario 2 is not desirable because of:

- Increased risk in a positive construction decision from investors and ability to raise capital

#### *Alternative Proposal to Demonstrate Ramp Up*

Baffinland understands the value in a phased approach to development, and would like to support the communities request for a more modest approach to increased production levels. However, carrying it out at the scale that has been proposed is not possible given the infrastructure and investment requirements to build the Phase 2 infrastructure and operate meaningfully above 6 Mtpa. Still, there is an opportunity for compromise that uses existing infrastructure (i.e. the Tote Road) and equipment (i.e.

haul trucks) to transport more modest amounts (<1.5 Mtpa) than what has been proposed, for the purposes of demonstrating what the required additional activities look like.

It is highly unlikely that more than 6.5 Mtpa could be trucked in a given season, leaving two options that would lead to a demonstration of the increased shipping activities that would occur under Phase 2.

These Options include:

1. Allow Baffinland to truck and ship up to 6.5 Mtpa for the duration of the additional permitting and construction period (approximately 3 years). This could require up to 7 more vessels (14 one way transits) than the current schedule each year; for clarity this would be approximately 90 vessels (180 one way transits) total per season for three seasons.
2. Allow Baffinland to truck up to 6.5 Mtpa for the duration of the construction period, stockpiling each year's additional amount until the third year when up to 1.5 Mt (culmination of trucking additional .5 Mt for three years) would be shipped in a single season (total of up to 7.5 Mt). This timeline is proposed to coincide with the construction of the second ore dock which would increase capability to ship more in a single shipping season. This could require up to approximately 21 more vessels (42 one way transits) than the current schedule or approximately 104 vessels (208 one way transits) total in that year. This allows for an additional two years at the current shipping schedule (approximately 80-85 vessels) and one year at a more significant level (approximately 104 vessels) before moving into the full Phase 2 operation (maximum of 176 vessels).

With either Option the Company would commit to informing the community annually on the expected capabilities of the year, updates on the construction schedule and would review all information provided by the Inuit Stewardship Plan that will inform Baffinlands adaptive management practices.

There are two challenges to the alternative proposal which should be considered by the Hamlet, which include:

- Baffinland has also committed to the MHTO that it would not increase trucking above 6Mtpa during the construction period, which was supported by the Qikiqtani Inuit Association (QIA) and the World Wildlife Fund (WWF). This was the rationale for removing the midway rail transfer options from the Phase 2 Proposal, which would have allowed for a combination of trucking and train transits during the construction period. Both options would see up to an additional 10 round trips (10 one way transits) by or haul trucks on average per day.
- Baffinland did not model and assess the impacts of trucking more than 6Mtpa (118 truck trips) along the Tote Road between the midway rail transfer point and Milne Port. While this represents a site specific gap in the assessment, trucking up to 12Mtpa (280 truck trips) along the Tote Road was modelled and assessed between the Mine Site and the midway rail transfer point, which has since been removed from the project description.

Additionally, it should be considered by the Hamlet that there is already a mechanism in place under the Inuit Certainty Agreement that allows for Inuit to have more control and decision making in the operations through the Adaptive Management Plan. Baffinland has already proposed an approach to adaptive management that is as precautionary, if not more than what has been proposed by the Hamlet

of Pond Inlet. Adaptive management at Mary River will follow a tiered approach that requires the establishment of low, moderate and high risk threshold levels that will link to predetermined sets of responses. When monitoring demonstrates that these thresholds are approached or passed, targeted investigations will occur to identify the source of, and potential solution to, the issue, which can and will include changes to the shipping operations. In accordance with the precautionary principle, complete certainty around the cause of an impact will not be justification for a delay in action.

*Strengthening Adaptive Management*

Adaptive management at Mary River will follow a tiered approach, that requires the establishment of low, moderate and high risk threshold levels that will link to predetermined sets of responses. When monitoring demonstrates that these thresholds are approached or passed, targeted investigations will occur to identify the source of, and potential solution to, the issue. In accordance with the precautionary principle, complete certainty around the cause of an impact will not be justification for a delay in action.

Since the signing of the Inuit Certainty Agreement (ICA) Baffinland and QIA have prioritized advancing this work on the Marine Monitoring Program (MMP) and the Aquatic Effects Monitoring Program (AEMP). To demonstrate the Company’s commitment towards progressive adaptive management at the Mary River Project, the following Table summarizes the initial set of response actions Baffinland would be required to select from to address the exceedance of an established moderate or high level threshold.

<b>Marine Wildlife - Moderate or High Action Pre-Defined Responses</b>
<p>Modifications to shipping activities:</p> <ul style="list-style-type: none"> <li>• Implement vessel convoy requirements – either southbound, northbound, in certain areas along shipping corridor, certain times of shipping season etc.</li> <li>• Limit the number of vessels allowed to call on Milne Port over the entire shipping season, or during specific periods within the shipping season (i.e. shoulder seasons)</li> <li>• Modify or expand existing transit restrictions</li> <li>• Modify vessel mix (e.g. vessel sizes) according to market availability</li> <li>• Permanent shift in the established shipping route through Eclipse Sound and Milne Inlet to avoid sensitive areas</li> <li>• Temporary deviations from established shipping route through Eclipse Sound and Milne Inlet to avoid heavy ice concentrations during the shoulder seasons</li> <li>• Cease or suspend shipping activities for a season or a component of a season (i.e. shoulder seasons)</li> </ul>
<p>Additional monitoring:</p> <ul style="list-style-type: none"> <li>• Install alternate technology for ship-based monitoring (i.e. cameras) as supplement for MWOs</li> <li>• Increase monitoring programs outside of the Regional Study Area</li> </ul>
<p>Negotiation of compensation</p>

Baffinland has agreed to a precedent setting approach to adaptive management, not only in terms of its tiered and precautionary approach, but it empowers the communities to be part of the decision making process that sets the thresholds and response. Following that, Inuit will also be directly responsible for monitoring the components of the environment most important to them through the Inuit Stewardship Plan, and this monitoring will equally feed into adaptive management that the company is bound by.

## Appendix B

### Statement #2 – Detailed Response

Since operations began at Mary River in 2013, Baffinland has gained valuable experience and has learned many lessons about attracting, hiring and retaining Inuit employees. These include;

- Making the atmosphere at the Mary River Project respectful and inclusive is key- we have updated our cultural orientation programming, hired by cultural advisors, and introduced workshops to share Inuit language and cultural heritage with employees.
- Inuit specific training programs are essential to growing the Inuit workforce- Baffinland partnered with the Qikiqtani Inuit Association (QIA), Governments of Canada and Nunavut to deliver the Qikiqtani Skills and Training for Employment Program (Q-STEP) which was critical to advances to employment between 2017-2019.
- Partnership and accountability lead to successes over time- continued collaborative relationship with QIA to ensure that programs and polices clearly reflect Mary River Project Inuit Impact and Benefit Agreement (IIBA) commitments and that accountability is central to measuring and achieve success in Inuit employment.

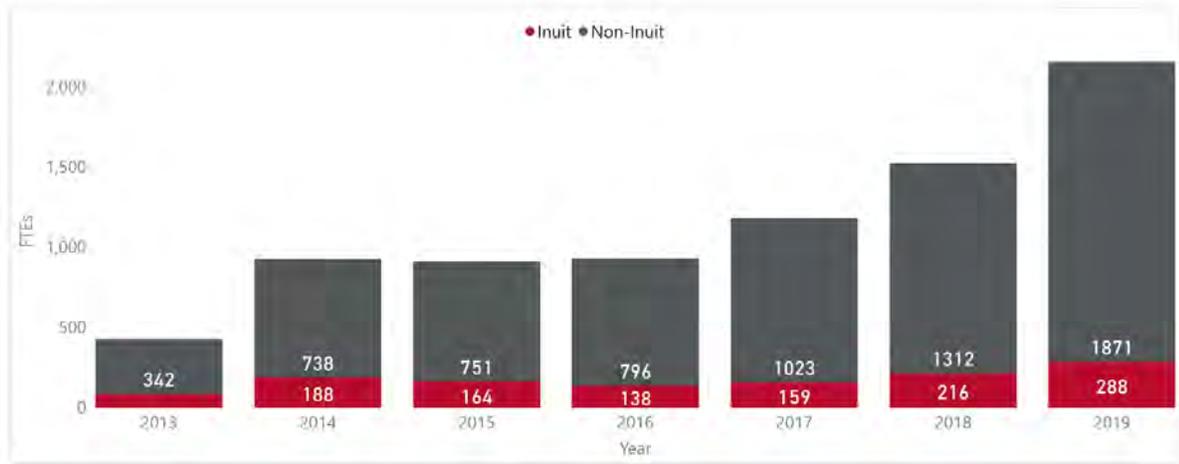
In 2018, Baffinland and the QIA renegotiated and amended the IIBA. As a result, Baffinland and the QIA agreed to establish a new process for forming Inuit employment goals by five distinct employment skills levels (Unskilled, Semi-Skilled, Skilled, Professional, Management). Inuit employment goals are set annually by Baffinland and the QIA against these employment skill levels. As such, there is not a global “25%” Inuit employment goal at the Mary River Project. Baffinland’s goal remains to maximize Inuit employment across all positions and overall at the Project.

Baffinland agreed to the new process outlined in the IIBA (2018) for establishing Inuit employment goals which is practical and adaptive to the employment circumstances at the Mary River Project as well as in recognition that the Company was not satisfied with levels of Inuit employment achieved. Through the amended IIBA and extensive financial investments in Inuit training from Baffinland, Inuit employment has steadily risen at the Project between 2016 and 2019. In 2019, Baffinland had achieved the highest number of Inuit full time equivalent employees in the Project’s history. As a matter of fact, in 2019, 580,197 hours were worked by Inuit at the Project, representing a 33%<sup>1</sup> increase from 2018 Inuit hours worked. Figure 1 reflects the growth in Inuit full time equivalent employees since 2016.

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<sup>1</sup> 2019 Socio Economic Monitoring Report for the Mary River Project, pg. XI.

Figure 1- Inuit and Non Inuit Full Time Equivalent (FTE) employment since 2013<sup>2</sup>



The Company, with other partners, has engaged in extensive Inuit specific training programs since 2017. Figures 2 and 3<sup>3</sup> below show the exponential growth in hours of training provided to Inuit between 2017-2019. Baffinland has committed millions of dollars to the development of an apprenticeship program, heavy equipment operator training program, and pre-employment programming. We are committed to spending at least \$1.5 million annually for the life of the mine on Inuit specific training programs, and have committed \$10 million towards the development of a training center in Pond Inlet. To further support Inuit, specifically Inuit women, who may see Baffinland as a perspective employer, the Company has committed to spending a total of \$15 million in the affected communities, including Pond Inlet, to develop early childhood care infrastructure as well as a childhood care subsidy for our employees such that their children can receive childcare while away working at the Project. All of these commitments have been made to support the growth of Baffinland’s Inuit workforce.

Figure 2- Baffinland and contractor training hours by Inuit status (2013 – 2019)

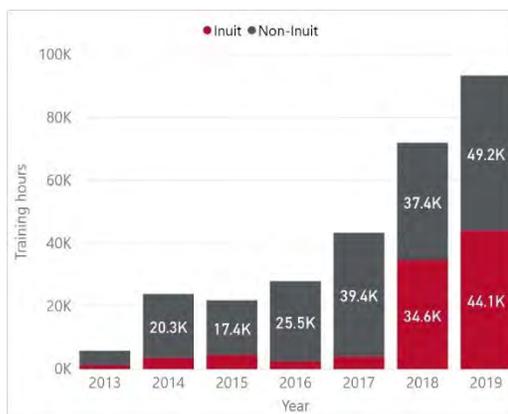
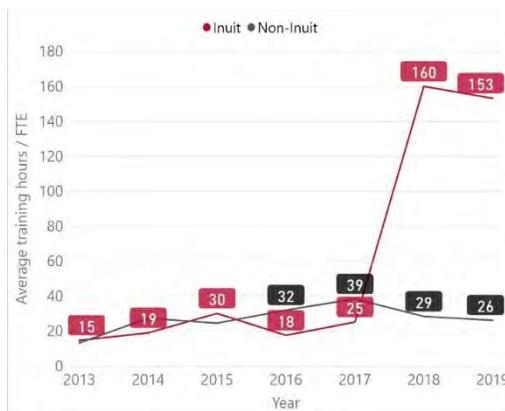


Figure 3- Baffinland and contractor average training hours / FTE by Inuit status (2013 – 2019)



<sup>2</sup> 2019 Socio Economic Monitoring Report for the Mary River Project, pg. 32.

<sup>3</sup> 2019 Socio Economic Monitoring Report for the Mary River Project, pg. 22.

While the Project workforce remains largely non-Inuit, Baffinland continues to work with the QIA, and governments to administer existing training programs, look for ways to improve training to employment programming, and finding new ways to ensure advancement opportunities exist to allow interested Inuit candidates to grow the career opportunities. This is not something that happens in just a few years but requires time, investments, and efforts by all parties to stride towards the maximization of Inuit employment at the Project.

Baffinland has also committed to an extensive accountability regime in the Inuit Certainty Agreement (ICA) as it relates to the failure to achieve Inuit employment goals, among others, at the Project. As described in Schedule 10 and 11 of the ICA, Baffinland shall be held accountable by the QIA for failure to achieve Measurable Objectives and Multi-Year Inuit Employment Goals. Any failures by Baffinland will result in financial penalties payable to QIA. QIA shall in turn provide any penalty payments from Baffinland to the affected communities, such as Pond Inlet, through the Community Benefits Policy they will develop as per ICA Schedule 27.

The Hamlet of Pond Inlet describes several social indicators in its letter that Baffinland would also like to address. The Company recognizes that while the Project presents Inuit communities with substantial opportunities, it is also likely to create social and cultural impacts and stresses on affected communities, including families and individuals. However, Baffinland remains of the view that with time and support the net benefits of increased family incomes and community wealth will increase. The Company has and continues to offer support to communities through the Community Counsellor Program and other IIBA programming such as the Ilagiiktunut Nunalinnullu Pivalliajutisait Kiinaujat Fund, through our Employee and Family Assistance Program, and supports offered through the Company Sponsorship and Donation program which can support youth, elder, and cultural programming. Many of the issues identified by the Hamlet are complex and require the partnership of industry, communities, Inuit Organizations, and governments to support appropriate solutions that enhance community wellbeing. Baffinland believes that it continues to play a strong role in supporting communities and will continue to do so well into the future.

Baffinland acknowledges the Hamlet's request that we take very seriously the impacts of employment on the community of Pond Inlet. We have been, and remain committed to, doing more to support the positive socio-economic development of affected communities. As outlined in the ICA, IDs 1 and 3, the Company has committed to support the creation of an Inuit Social Oversight Committee to allow for an Inuit-driven, social monitoring program related to the Project. This monitoring program will be focused on community wellbeing. This monitoring program will focus on community impacts related to the mine (i.e. community wellness).

The Company also believes that by continued and expanded operations at the Mary River Project contributions to the Territorial economy will also continue to make a positive difference in communities. Iron production added \$724 million to Nunavut's GDP in 2019, representing 23% of the Territory's economy. This means increased revenue for Government to support critical housing, education, and healthcare priorities. We also believe that wages to Inuit working at the Project will help families and communities. Inuit employees earned \$20.2 million in wages in 2019, equal to \$70,100 per employee on a Full Time Equivalent basis. This injection of wealth into communities is all the more important when

considering the North Baffin region has a population of just over 6,700<sup>4</sup> and where median employment income is less than \$17,000<sup>5</sup>. In 2015, when the last Census was taken, 2,325 residents reported working that year but only 860 of those respondents reported working all year on a full-time basis. North Baffin residents also reported their total income for the year was \$111.3 million<sup>6</sup>.

Baffinland suggests that the commitments it has already made in the IIBA and ICA meet the intent of the request related to Inuit employment and support for enhanced community wellbeing made by the Hamlet of Pond Inlet. Baffinland remains committed to maximizing Inuit employment at the Mary River Project and has committed the necessary financial and human resources to achieve this goal over the life of the mine. We also believe that the significant contributions we have made in the ICA to support communities, Inuit employees, and communities will lead to enhanced community wellness overtime.

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<sup>4</sup> Statistics Canada, Demography Division, Special Tabulation. Prepared by Nunavut Bureau of Statistics, August 6, 2020.

<sup>5</sup> Statistics Canada, Income Statistics Division (2019). Special Tabulation. Prepared by Nunavut Bureau of Statistics, January 30, 2019.

<sup>6</sup> Statistics Canada (2017). North Baffin community profiles. 2016 Census. Catalogue no. 98-316-X2016001. November 29, 2017.

## Appendix C

### Statement #3 – Supporting Technical Rationale

The Hamlet of Pond Inlet has proposed that Baffinland delay the start of the shipping season by 2 weeks from when landfast ice begins to break up, and after that point to rely on the MHTO to agree to the initiation and end of the shipping season. The MHTO has also previously proposed to Baffinland that the shipping season end no later than October 15<sup>th</sup> in a given year (Scenario 1), but more recently has modified proposed that no shipping occur at all while ice is present (Scenario 2). Table 1 provides a summary of the potential shipping season lengths under average, early (best case) and late (worst case) ice conditions, according to ice data collected over the last 23 years. The ice conditions used have been included in the Environmental Impact Statement Addendum submitted to NIRB in 2018. The first highlighted column (Scenario 1 - Season Length) is based on the assumption the MHTO would support shipping starting as soon as the two week waiting period is over, through to October 15<sup>th</sup>. The alternative, and more aligned with MHTO’s current recommendations, is in the highlighted column on the right, where Baffinland is restricted to the open water season only.

**Table 1 - Pond Inlet Proposal for Icebreaking**

Break-up		Scenario 1			Scenario 2 (Open Water)
		2 Week Delay	Season End	Season Length (days)	Season Length (days)
Average	19-Jul	2-Aug	15-Oct	74	71
Early	11-Jul	25-Jul	15-Oct	82	93
Late	28-Jul	11-Aug	15-Oct	65	44
Variability				17	49

As outlined in the Phase 2 Final Environmental Impact Statement Addendum, shipping has been assessed to require up to 176 ore carriers to come to Milne Port during the shipping season. Operational experience and modelling shows that Baffinland can expect to load one vessel, per dock, roughly every 24 hours. With two ore docks under a Phase 2 scenario, this would require a minimum of 88 (176/2) loading days in a season. In addition to the 88 days of loading, contingency days must be added to account for periods when loading can’t occur, including planned and unplanned maintenance of equipment, bad weather days and the late arrival of vessels. An industry standard of 7% contingency is typically applied, raising the minimum length of the shipping season required to 94 days. Table 2 and 3 below demonstrate the deficits in shipping that would be created by implementing the limitations on the shipping season proposed by the Hamlet of Pond Inlet.

**Table 2 - Scenario 1, Limited Shipping in Ice**

Break-up	Minimum Shipping Days Needed	Length of Season	Lost Days	Lost Vessels	% Lost
Average	94	74	20	40	23%
Early	94	82	12	24	14%
Late	94	65	29	58	33%

**Table 3 – Scenario 2, Open Water Shipping Only**

Break-up	Minimum Shipping Days Needed	Length of Season	Lost Days	Lost Vessels	% Lost
Average	94	71	23	46	26%
Early	94	93	1	2	1%
Late	94	44	50	100	57%

Baffinland cannot sustain a Project that doesn't offer operational certainty. In both Scenario 1 and Scenario 2, approximately 25% of vessels would not be loaded in an average season. In the shortest possible seasons for shipping where 33% to 57% of vessels are turned away, this could equate to 4Mt to 7Mt lost. If 7Mt were lost that would be a reduction in what is already approved, and an economically infeasible Project in the long-term. These losses also show that operational flexibility is not possible. If there is no scenario where shipping 12Mt is possible, it is not reasonable to expect that more than 12Mt could be shipped to make up for those losses.

*Chartering Larger Vessels - Opportunity and Challenge*

Phase 2 proposes to build a second ore dock capable of loading Capesize vessels (150,000DWT – 250,000DWT) that can carry 2-3 times more than Panamax vessels (up to 80,000DWT). While this creates an opportunity to reduce the number of vessels that need to come to Milne Port each season, there two critical challenges that need to be considered, which include:

- **Market availability of Ice-Class Capesize vessels** – Baffinland is not building its own vessels for Phase 2 and will continue to be limited to chartering vessels as they are available on the open market. Based on a 2019 market analysis, which was supplied as a deferred response to the NIRB in January 2020, there is currently only one Ice-Class Capesize ore carrier capable of coming to Milne Port throughout the season. Firstly, a number of the European ports that we deliver to cannot accept Capesize vessels due to draft restrictions and/or length of berth issues. Secondly, the existing market for Capesize vessels is dominated by trade flows to the Far East from a few large iron ore suppliers. A large percentage of the Capesize fleet cycles between Brazil, Australia and the Far East with iron ore as a key cargo. BIM must compete against the smaller trades utilizing Capesize (ie iron ore out of the St. Lawrence). Non-Ice Class vessels are limited to coming to Milne Port (Zone 13) to between August 15 and September 20 according to the Arctic Shipping Safety and Pollution Prevention Regulations (ASSPPR).
- **Milne Port, Ragged Island and Destination Port Infrastructure Constraints** - Only the new ore dock will be capable of loading Capesize vessels, and not all anchorages can be filled by Capesize vessels at Ragged Island or at Milne Port at one time. Given that Capesize vessels are larger than Panamax and Post-Panamax vessels, they require longer docks with deeper drafts. When anchored, they require more room to drift, crowding the anchorages. Beyond the Project area, there are also limits to what our destination ports can accept, and many are not capable of accepting Capesize vessels. These combined infrastructure constraints significantly reduce the potential to maximize the use of available Non-Ice Class Capesize vessels during the short season they're permitted to come to Milne Port.

In the Project Description Baffinland proposed no more than 14 Capesize ore carriers would come to Milne Port during the shipping season, and in the near future that is expected to be unlikely because of their current availability. Although Baffinland will work to minimize the number of vessels coming to Milne Port each year through the use of larger vessels, this alone would not allow Baffinland to limit its shipping to the open water season only.

### *Baffinlands Alternative Proposal*

Baffinland understands the importance of ice to both Inuit and wildlife and believes there is opportunity to build on the strong mitigations already put forward as part of the Phase 2 Proposal. Since 2019 Baffinland has implemented a two stage transit restriction system on any vessels coming to Milne Port during July based on ice concentrations. The purpose is to guarantee a minimum amount of “quiet time” each day for marine mammals based on the amount of time icebreaking is expected to occur in a given transit. The two stage system includes:

1. Until July 31, a maximum of one transit will occur per day (24-h period) where ice concentrations of 6/10 or greater cannot be avoided along the shipping route.
2. Until July 31, a maximum of two transits will occur per day (24-h period) where ice concentrations less than 6/10 but greater than 3/10 cannot be avoided along the shipping route.
3. When a continuous sailing route of uninterrupted ice concentrations of 3/10 or less is available between the entrance of Pond Inlet and Milne Port, then icebreaker transits and other unescorted vessels in the RSA will resume under regular operating conditions.

In the two years these transit restrictions have been implemented Baffinland has at the same time carried out aerial surveys throughout the shipping season to monitor narwhal abundance in Milne Inlet, Eclipse Sound and Admiralty Inlet. While the results of the 2020 surveys are still being processed, the results of the 2019 surveys demonstrate that the current narwhal abundance in the Eclipse Sound summer narwhal stock is consistent with the estimates from previous surveys carried out by DFO in 2004, 2013 and 2016. This is consistent with the predictions in the original FEIS and FEIS Addendum for the Early Revenue Phase.

Baffinland is confident that transit restrictions are an effective tool for reducing disturbance to narwhal and other marine mammals, and as such, is proposing to expand the system in the Spring and into the Fall when ice is present. Further, Baffinland has previously proposed fixed dates to plan for the end of the shipping season by to the MHTO and is committed to that offer. The following is Baffinlands alternative proposal for shipping through ice.

- Baffinland will extend the application of the transit restrictions beyond July 31 to as long as they are required based on ice concentrations along the shipping route. That is transit restrictions will be in place from the start of shipping after landfast ice has broken until ice less than 3/10 thickness is present.
- Baffinland will plan to complete each shipping season by October 31 each year, and only ship past that date as a matter of contingency if ice conditions allow; No shipping will occur past November 15 or once landfast ice has formed along the shipping route, whichever is earlier
- Baffinland will apply a modified one-stage transit restriction system in the Fall, based on the stages of ice development (i.e. ice thickness), which is consistent with IQ received relating to the commencement of Inuit use of sea ice in Ukiaksaq (October to Mid-November)

- Baffinland proposes to expand the existing community held shipping meetings held each year in Pond Inlet to include further discussion of IQ that will help inform continuous improvements to Baffinlands monitoring programs and operations.

This proposal is in addition to all other commitments currently on the record in relation to icebreaking, which include a combination of environmental and land use consideration, presented here for reference:

#### Environmental Considerations

- Vessel Captains will always look to minimize icebreaking by choosing the path of least resistance (i.e. open water leads) when possible
- At the start of the shipping season vessels will be required to remain at least 40 nautical miles from the edge of the Nunavut Settlement Area until they are cleared to enter Eclipse Sound
- Ship Board Observers will continue to be present on the icebreakers to identify and avoid encounters with marine wildlife along the shipping route
- Vessels are requested to report on marine wildlife they observe along the shipping route as through an incidental observation monitoring program
- Baffinland will continue to restrict vessels from travelling through areas identified as important to wildlife and/or Inuit, including Kuluktoo Bay, the western shore of Bruce Head and Tremblay sound

#### Land Use Considerations

- Before the shipping season commences Baffinland will continue to confirm with the MHTO that the floe edge is closed for hunting
- Baffinland shipping monitors will continue to be based on Pond Inlet and facilitate greater communication between community members, the Company and vessels
- Baffinland will continue to implement the AIS tracking system, and maintain an AIS tracking station in the MHTO office
- Baffinland will continuously improve its Shipping Communication Protocol with Pond Inlet
- Baffinland will continue to hold a pre- and post- shipping season meeting in the community of Pond Inlet. Baffinland will commit to expanding the scope of those meetings to include review and consideration of any findings from the Inuit Stewardship Plan and Inuit Committees that the community feel is relevant to Baffinland practices.

## **Attachment 2**

Baffinland January 22 2021 Memo to Hamlet of Pond Inlet Re. Updated  
Proposal Re. Progressive Shipping Increases

## Progressive Shipping Increases

Baffinland has continued to consider options to meet the objectives of the Hamlet of Pond Inlets Proposal with respect to ‘phasing in’ the shipment of 12 million tonnes in increments, in a way that will support investment in Phase 2. All constraints shared with the Hamlet in our response of January 13, 2021 continue to apply.

Baffinland acknowledges that the Hamlet has indicated they would be willing to support a project that is not based on an immediate increase in project shipping from current shipping activities (~83 vessels) to proposed levels (176 vessels) in a single shipping season. Below we propose a way to meet the full intent of the Hamlets proposal while maintaining the viability of the project.

### Baffinland Proposal

	Stage 1	Stage 2**		Stage 3		Stage 4
	2018-2021	2022	2023	2024	2025	2026+
<b>Maximum Vessels</b>	<b>83</b>	<b>113</b>	<b>113</b>	<b>143</b>	<b>143</b>	<b>176</b>
<i>Increase Above PIP (6Mtpa)*</i>	0	30***	30***	60	60	93
<b>Adaptive Management</b>	AMP Finalized; Monitoring Programs Confirmed; Evaluation of 2018-2021 Monitoring Program against AMP	Baffinland and Inuit Stewardship Plan monitoring. Clear defined criteria to move to next stage of increased shipping: Do results exceed moderate or high risk thresholds related to increased shipping in Adaptive Management Framework? 1) Yes – maintain levels for more monitoring or implement mitigation measure with increased activity or reduce shipping level. 2) No – increase shipping to Stage 3 with monitoring		Baffinland and Inuit Stewardship Plan monitoring. Clear defined criteria to move to next stage of increased shipping: Do results exceed moderate or high risk thresholds related to increased shipping in Adaptive Management Framework? 1) Yes – maintain levels for more monitoring or implement mitigation measure with increased activity or reduce shipping level. 2) No – increase shipping to Stage 4 with monitoring		Baffinland and Inuit Stewardship Plan monitoring. Operations under Adaptive Management Framework: Do marine monitoring results exceed moderate or high risk thresholds? 1) Yes – implement adaptive management strategies (including reduced vessel activities) 2) No – Continue Monitoring

\*Based on an approximation of how many tonnes would be carried by the maximum vessels, but there is not a perfect correlation. (Average of 68,000 tonnes per vessel).

\*\*Additional vessels in 2022 and 2023 would not be hauling ore, they would only be simulating the voyages through the RSA additional vessels would take

\*\*\*Additional vessels will be included in the calculation of payment to the Tasiuqtiit Working Group even though they are not carrying ore and Baffinland has not shipped more than 6 million tonnes (i.e an additional \$300,000 to the annual payment as per the agreement).

## Rationale

The Hamlet of Pond Inlet specified a request to increase shipping activities by 1.5 million tonnes per annum between 6 million and 12 million tonnes transported. This additional tonnage equals an increase of approximately 22 vessels per year over a four-year period. By focusing on activity levels, in this case shipping, Baffinland believes there is an alternative approach that balances Inuit support for incremental increases in shipping and the company's need to access the investment required to build and operate the Phase 2 project. It is proposed to do this by initiating a gradual increase to shipping activities via simulated transits during the construction period. Specifically, this includes:

- Increasing shipping activities in 3 stages, roughly 30 vessels at a time, over a period of 5 years.
- Chartering additional vessels in 2022 and 2023 to simulate the incremental increases in shipping activities
- Evaluation of monitoring results against agreed upon thresholds for at least two-years at each stage
- Planning for additional mitigation measures or activities in advance of increasing to the next stage and:
- Constraining shipping activities in 2024 and 2025 below what would otherwise be possible

This model allows for the progressive implementation of the Adaptive Management Plan and the Inuit Stewardship Plan, where Inuit led monitoring programs would also be feeding into the understanding of potential project effects. At the completion of each stage, if monitoring programs **have not** demonstrated the exceedance of predetermined thresholds, Baffinland would be in a position to increase the number of vessels coming to Milne Port. Alternatively, if monitoring programs **have** demonstrated exceedances of predetermined thresholds, then the Hamlet of Pond Inlet, through the Inuit Committee, would be part of the process to determine the most appropriate response, which could include maintain the shipping levels at any given stage, increasing shipping with additional mitigations expected to address the effects, or to reduce shipping and production if the circumstances require it.

## Conclusion

We are confident that by implementing the proposed increase to shipping activities we will demonstrate that shipping can increase and be maintained at higher than current levels without exceeding agreed upon thresholds of risk. This proposal also allows additional time to modify activities if impacts above the agreed upon thresholds occur in advance of a full ramp up of the operation. It provides the appropriate planning tools and timelines to give increased confidence to Inuit that shipping activities can occur at the required levels while protecting the marine environment, and Inuit rights and culture.

Baffinland appreciates the proposals put forward by the Hamlet of Pond Inlet and the QIA and the collaborative approach to finding mutually agreeable solutions this demonstrates.

If the counter proposal put forward by Baffinland is accepted, we will action and be ready to implement all included commitments by the timelines agreed upon.

### **Attachment 3**

Baffinland January 23 2021 Memo to Hamlet of Pond Inlet Re. Spring  
Ice-Breaking and Start of Season Proposal



January 23, 2021

## **SPRING ICE-BREAKING AND START OF SEASON PROPOSAL**

Baffinland acknowledges that the Hamlet of Pond Inlet (Hamlet) would like Baffinland to reconsider its conditions to start the shipping season in July. Baffinland responded to the Hamlet on January 13<sup>th</sup>, proposing to extend the Spring transit restrictions as long as the ice conditions require that they be in place rather than the current end date of July 31. This extension was aimed at reducing noise levels even further to minimize disturbance to marine wildlife at the beginning of the season when heavier ice conditions are present.

This response focuses on the concern you expressed to us about Inuit use of sea ice at the time we begin our shipping operations annually. Baffinland has considered this further and is proposing to address this issue through the development of a more robust communication protocol designed with the community that will identify the years in which a potential conflict between community use of sea ice and Baffinland shipping may occur.

Our understanding is that this conflict is most likely to arise in years where ice out front of the community remains stable enough for community members to use their skidoos (or boats) to access mobile ice pans that allow for hunting or recreational activities while at the same time all of Baffinland's conditions for the start of shipping have been met including confirmation that the floe edge is closed for hunting and landfast ice has broken along the entire shipping corridor.

Baffinland is proposing additional steps to communicate directly with the community to better understand how the community is using the ice in any given year and take appropriate actions to ensure that no potential interaction or disturbance to use of sea ice outside of the community occurs during the early part of the shipping season.

## **CURRENT SHIPPING ACTIVITY-RELATED COMMUNICATIONS**

Baffinland has been holding pre and post shipping season meetings with the Mittimatalik Hunters and Trappers Organization (MHTO) and the Hamlet of Pond Inlet since 2017 in order to better inform the residents of Pond Inlet about anticipated and past shipping activities. As part of these engagement efforts Baffinland has received extensive feedback from the community about its shipping operations, and where possible, has modified those operations base on community feedback.

In keeping with its commitment to continuing to work with Inuit to inform decisions, Baffinland has developed a draft Shipping Communications Protocol to guide specific engagement activities with the MHTO and Hamlet (which has been submitted as part of the Phase 2 review). The Communication Protocol includes considerations for pre-season, during shipping and post season communications, with key components summarized in Table 1 below.

## **PHASE 2 PROPOSAL**

For Phase 2, to avoid potential encounters between community members from Pond Inlet using the sea ice around the community and beginning season shipping activities, the following will be required each year prior to the commencement of shipping:

- Baffinland provide daily updates to the Hamlet and MHTO starting upon first arrival of vessels in Baffin

Bay;

- Baffinland requests confirmation from the MHTO that the floe edge is no longer being used for hunting;
  - MHTO provides conformation the floe edge is no longer being used for hunting
- Baffinland issues a notice to the Hamlet and MHTO at least 72 hours before Baffinland expects landfast ice to be broken along the entire shipping route; through the notice Baffinland requests confirmation that the ice around Pond Inlet is no longer being used by the community
  - Baffinland Shipping Monitors work with Hamlet and MHTO to confirm the ice around Pond Inlet is no longer being used by the community

Under the proposed system outlined above, Baffinland will not commence shipping before 1) landfast ice has broken along the entire shipping route, 2) the MHTO has confirmed the floe edge is no longer being used by hunters, and 3) Baffinland Shipping Monitors, in consultation with the Hamlet and MHTO, have confirmed how the ice around Pond Inlet is being used by the community.

Community sea-ice use overlaps with start of shipping season

In years where community sea-ice use outside of Pond Inlet continues to overlap when all of Baffinland's conditions for start of the shipping season commences, a number of additional actions can be taken:

1. Work with the community to understand how many and where community members are using the ice (e.g. party of 3, 5 km from the shoreline for day trip of hunting)
2. Have frequent communication with the shipping monitors to understand degrading ice conditions and continued community use
3. Provide notice to all vessel captains to avoid a set distance from the community to ensure no interactions occur, except in instances of vessel safety
4. As weather conditions allow, complete an aerial survey in advance of the first vessel transit near Pond Inlet to identify/confirm community use
5. Increase frequency of communications to allow those on ice to be notified of potential shipping activities.

The above list is provided as examples of what the procedures could include, but it is expected that additional items may be added or adjusted as we work through the development of the protocols directly with the community.

Community sea-ice use does not overlap with start of shipping season

In years where it is confirmed that the ice is not stable to be used by the community when all of Baffinland's conditions for start of the shipping season commences, normal shipping operations and communications will continue.

**Table 1: Key Components of Draft Shipping-Related Communications as submitted for the Phase 2 review**

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Timing	Key Component	Description/Timeline
Pre-season	Pre-Shipping Season Meeting	Baffinland to host a Pre-Shipping Season Meeting with representatives of MHTO, the Hamlet of Pond Inlet and the QIA.
	Confirmation of floe edge closure	Baffinland to obtain written confirmation from the MHTO that the sea ice is no longer being used by hunters (i.e., floe edge has been closed to hunters).
	Local radio announcement of start of shipping season	Baffinland to notify the residents of Pond Inlet of the anticipated start dates for Baffinland-related shipping activities on local public radio. 2020.
	Official start of shipping season	Baffinland notifies the official start of the shipping season by sending a letter addressed to the MHTO, and shares letter with the Hamlet and the Pond Inlet QIA representative via email.
During Shipping	Ongoing shipping activities-related communications	Baffinland maintains active communications with the MHTO and residents of Pond Inlet about ongoing shipping operations throughout the summer via multiple modes including local public radio, marine VHF radio, social media, and live ship tracking available on the Baffinland website ( <a href="http://www.baffinland.com">www.baffinland.com</a> ) under its >Operation>Shipping & Monitoring> webpage.
		Hiring of shipping monitors based in Pond Inlet
		Dedicated email address ( <a href="mailto:shipping@baffinland.com">shipping@baffinland.com</a> ) for concerns and comments directed to Baffinland
		Posting of Shipping and Marine Monitoring Fact Sheet, including Shipping Route, in public locations in Pond Inlet.
		Maintain comment/concern tracker relevant to shipping season
Post-season	Overall shipping season summary	Baffinland to prepare a summary on all vessel-related activity
	End of Shipping Season Meeting	Baffinland to host an End of Shipping Season Meeting with representatives of the MHTO, Hamlet of Pond Inlet and the QIA. Meeting is typically held in the same year of shipping season being discussed after the last Baffinland Project vessel has left the RSA.
		Baffinland considers the potential for integrating feedback in planning of subsequent year's shipping operations, including consideration of adoption of new management and mitigation measures.















































