

**Mittimatalik Hunters and Trappers Organization's  
Written Questions: Extended NIRB Hearing for  
BIM Phase 2 Proposal**

Submitted March 1, 2021

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# Questions to Baffinland (BIM)

## Public Consultation, IQ, Alternatives Assessment

<b>MHTO-BIM-01</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Alternatives Assessment - Activity levels
<b>Question:</b>	

What is the maximum number of ore cars each train can haul within the currently proposed infrastructure (sidings, track limits etc)? How many cars and locomotive engines has BIM procured to date?

BIM has requested authorization for 176 ore vessels each year, and up to 10 train trips per day to achieve 12 MTPA production and shipping rates. It has been demonstrated that 12MTPA could be achieved using fewer ore vessels, and likely fewer train loads as well.

What is the configuration that would result in the fewest number of daily train trips and annual ore vessel transits to achieve 12 MT per year of ore production and shipment?

Specifically, we are asking for the most conservative numbers, being those which would cause the **least** amount of environmental disturbance.

<b>MHTO-BIM-02</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Alternatives Assessment - Rail route feasibility
<b>Question:</b>	

What is the rationale for selection of Route 3 as determined in the context of the feasibility criteria set out in the FEIS Addendum?

Despite having incomplete technical feasibility considerations, incomplete information about the economic costs (feasibility), and not conducting any further community

engagement on the preferred route, or rail project overall - BIM is asking the MHTO, NIRB and regulators, to accept a preferred option for which BIM itself has incomplete information regarding feasibility?

<b>MHTO-BIM-03</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	IQ - Consideration and Integration
<b>Question:</b>	

In a response to Dr. Tester during the January-February Hearing, Lou Kamermans stated that IQ material was available to BIM experts to “consider” as part of their assessments.

1. Does BIM agree that the NIRB EIS Guidelines require specifically that IQ be integrated, and not simply considered?

BIM said during the January-February Hearing that it has incorporated statements and best practices from its 2019 IQ Management Framework as these relate to the ongoing collection, consideration, and incorporation of IQ and its work with Inuit, including “considering IQ and other forms of knowledge from Inuit with an equal weight to other information inputs.” Yet during the proceedings, BIM staff made statements about impacts of the project and how these are to be considered as “independent of IQ.”

2. Can BIM clarify how, and which, impacts specifically it considers independent of IQ and provide justification?

BIM’s TSD-3 states “The Phase 2 Proposal will continue to provide sustainable and durable social and economic benefits to Inuit without compromising the integrity of the ecosystem or the right of future generations to the sustainable use of renewable and non-renewable resources”.

3. How does BIM define “the right of future generations to the sustainable use of renewable resources”? Please also indicate which renewable resource(s) this statement is referring to.

4. While it may not be a specific VEC or VSEC, given BIM’s statement, how was the right of future generations to the sustainable use of renewable resources considered or assessed? How is this definition different from the ability of Inuit to exercise their harvesting rights, and if a distinct consideration, how was the assessment specifically geared to address each of these?

<b>MHTO-BIM-04</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	IQ / Consultation
<b>Question:</b>	

In Section 4.1.1 of the March 2019 document “Inuit Qaujimagatuqangit (IQ) and the Mary River Project Phase 2 Proposal” (Document ID: 331843), BIM states that collection of IQ “occurs primarily through the Mittimatalik Hunters and Trappers Organization's (MHTO) participation in the MEWG, TEWG, and QSEMC/SEMWG processes, when members review Baffinland’s monitoring results and comment on Project monitoring plans.” In BIM’s IQ presentation during the 2019 Hearing, it cited 40 MEWG and TEWG meetings as evidence of public consultation.

1. When were the last QSEMC and SEMWG meetings held, and please identify which past QSEMC and/or SEMWG meetings the MHTO has attended.
2. Recognizing BIM funds the attendance of MHTO members’ attendance at working group meetings, you will agree the MHTO notified BIM that it does not have adequate resources to participate effectively in MEWG and TEWG meetings beyond member attendance at the meetings themselves?
3. Has BIM consulted with the MHTO to confirm the meeting format(s) and structure(s) are acceptable means to collect IQ? Please provide evidence or records of these consultations and results.
4. Has BIM consulted with the MHTO ahead of specific meetings to confirm the topics, spatial areas, or other particular details that would be discussed, and/or clarified what specific IQ might be sought during the sessions - questions that may be posed, or areas for which BIM was specifically seeking Inuit perspective? Please provide evidence or records of these advance notifications, specific consultations related to this question, and results.
5. Has BIM followed up with the MHTO after each meeting specifically to validate what was shared and considered to represent IQ, to verify what was said and to confirm how it would be applied to BIM’s operations/monitoring/mitigations? Please provide evidence or records of these consultations and results.
6. Why have no other HTOs been invited to participate in the working groups?

<b>MHTO-BIM-05</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	IQ / Consultation - Additional Phase 2 consultation
<b>Question:</b>	

The Phase 2 community open houses in Pond Inlet and Arctic Bay, described in TSD-3 –Phase 2 Workshop report (Document ID 320557), were cited as a way to help “ensure all community members and organizations had an opportunity to participate in the data collection process, while improving the validity of the results.” BIM had acknowledged that additional community engagement would be necessary to fully satisfy public consultation requirements on the Phase 2 project proposal.

1. Does BIM believe that its meetings met a threshold for adequate community engagement and input given that a total of only 120 people attended across all five public events and in both Pond Inlet and Arctic Bay combined?
2. Is there a record of comments received from these open house meetings? If so, please direct reviewers to the location of this record, and if not, please explain why no record was kept?
3. Has further IQ collection and community consultation been undertaken to inform BIM’s effects assessment, and proposed mitigation and monitoring plans, in addition to the public consultation completed in 2015, 2016 and 2019?
4. Did Inuit offer during any engagement sessions that moving from road to rail was a preferable option? If so, where are those comments documented?
5. During public engagement and consultations, or IQ collection workshops, were any participants specifically asked about the preference for a railway over truck haulage of ore? If so, where are those questions and responses documented? If not, why not?
6. During public engagement and consultations, or IQ collection workshops, did BIM at any time present the option of covering trucks to prevent dust? If so, where are those questions and responses documented? If not, why not?

TSD-3—Phase 2 Workshop report (Document ID 320557) states “Open water shipping raises fewer concerns than shipping through ice and Eclipse Sound was often seen as an acceptable location for open water shipping to occur.”

7. Has BIM hosted any workshops to specifically engage with Inuit regarding their perspectives and/or to solicit or learn from IQ with regard to shipping during the shoulder seasons? What about workshops regarding railway shipment of ore since introducing the proposed northern railway? If not, why not? If so, please provide details including invitees, questions asked, presentation materials given, and a record of all comments and questions raised by participants. Please also provide evidence of consultation with residents of Pond Inlet to discuss meeting format and questions to be asked ahead of any session(s) held, any changes made based on those consultations, and evidence of verification work that was conducted following the session(s).

<b>MHTO-BIM-06</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM

<b>Subject:</b>	IQ / Consultation - CRLU monitoring
<b>Question:</b>	

Slide 35 of the 2020 Hearing presentation references Culture, Resources and Land Use Monitoring.

What is the purpose of the Culture Resource and Land Use monitoring program, and what would such a program entail? The 2019 IQ Management Framework notes that the CRLU Monitoring program would be detailed within one year of the revised project certificate, in consultation with the QIA - does this mean the monitoring program would be finalized one year following possible Phase 2 approval?

The framework also states that BIM's intention is to conduct the first CRLU Monitoring Program three months after commissioning the railway. What baseline information is available to date regarding culture, resources and land use - specifically what will be used in comparison for trends from future monitoring? What are the thresholds and indicators to identify acceptable levels of change, and to measure whether changes are occurring?

What strategies would be employed by BIM if the impacts of the railway or other activities are determined to be so unacceptable to Inuit, perhaps irreversible and permanent, that the activity, or entire project, is unacceptable to Inuit?

The application for Phase 2 was submitted in 2014, the scope was significantly modified in 2017 and the FEIS Addendum was submitted in 2018; why was an updated assessment of culture, resources, and land use not included in the FEIS Addendum?

<b>MHTO-BIM-07</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	IQ / Consultation - Project description and mitigations
<b>Question:</b>	

Slide 32 from the IQ Presentation delivered during the January February hearing highlights project description changes based on IQ - specifically noting that BIM has "developed stringent shipping restrictions when ice is present." Are those measures the 9 knot speed limit, limits on vessels (3 in the RSA during heavy ice), implementing caravans (1 transit up to 5 ore carriers in heavy ice), etc.? Please clarify if there are other stringent shipping restrictions when ice is present, and clarify for which ice conditions these restrictions are in place.

1. How have these “stringent” shipping measures been informed by IQ, with specific reference to each measure?
2. How has BIM addressed the stated opposition of the community of Pond Inlet to shipping during the shoulder seasons and the request to suspend shipping on October 15?
3. Has BIM introduced any project description changes that would address the impacts that its shipping has had, or will have, on narwhal and harvesting?
4. Does BIM propose further reducing the speed of ships travelling in the Regional Study Area for Phase 2 (i.e. to travel at speeds less than 9 knots)? If not, does BIM consider the same speed limit in place for existing operations, and implementing a caravan rule of 4-5 ships plus ice breaker to meet the definition of a stringent measure?
5. We also note that Slide 32 "Project Description Changes" lists the installation of acoustic monitoring devices at the floe edge, developing community specific engagement guidelines, and integrating relevant community based monitoring into Phase 2 adaptive management planning. Please clarify if these are examples of changes, or commitments, that are based on what BIM has heard from the community and/or based on IQ in respect of Phase 2?

<b>MHTO-BIM-08</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	IQ / Consultation - Workshops and indirect effects
<b>Question:</b>	

BIM hosted community risk and EA workshops in 2019. Did BIM intend to rely on these as opportunities to collect IQ, and if so, had it clarified with invited organizations and/or participants ahead of time that the goal was to collect IQ, and to confirm participants were selected based on expertise and the focus of the workshop(s)? If so, where are references and evidence of those communications provided?

BIM indicated that risk workshops provided input on proposed management measures and that this would be supplemented by information from the Tusaqtavut studies to form the basis for how the project would be monitored going forward. Where is that information compiled and documented? Was verification of the IQ collected during risk workshops undertaken? If so, where is evidence of the verification work?

1. Have any workshops held since 2018 collected IQ that has been used to inform the identification and assessment of indirect impacts in affected communities, specific to harvesting? If so, please give details of which workshops these were, and what direct and indirect impacts were discussed and considered. Please provide references to where that information is provided. Please also confirm that verification of IQ collected was undertaken after the workshops/sessions, and provide references to where that information is provided.

2. Why has Baffinland not hosted IQ workshops to specifically understand hunters' perspectives on the current operations, and on proposed Phase 2 activities?
3. Is it BIM's opinion that it has collected adequate IQ specific to this project scope? How does the effort level compare to those undertaken to collect IQ in 2015-16 for Phase 2, and prior years related to the ERP and original Mary River applications?
4. Did BIM consider that its absence from consultations with communities would impact its credibility with communities who have been stressing the need for BIM to undertake further consultation and do engagement to inform its incorporation of community concerns regarding Phase 2?

<b>MHTO-BIM-09</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Alternatives Assessment - Future Development Scenarios
<b>Question:</b>	

Within BIM's September 9, 2020 response to the NB Communities (Document ID XXX), it confirmed that:

“One scenario Baffinland continues to investigate is the feasibility of transporting more ore (i.e. 18 Mtpa) through the Northern Transportation Corridor. To clarify, this is only a concept and not yet defined to a level fit for meaningful discussion, let alone for the environmental studies and community engagements required to support additional applications to regulators. It should be recognized that it will take some time to get to 12 Mtpa of rail and shipping capacity; but with experience, over time, we may be able to optimize both operations and increase beyond 12 Mtpa, following the appropriate approvals.

1. When does BIM project it may be in a position to increase production at Mary River beyond 12MT per year? Specifically, if Phase 2 is approved, how soon after ramping up operations to 12 MT per year does BIM anticipate achieving greater efficiencies in its operations?
2. What would be required in addition to the current infrastructure and proposed activity levels to “plan the operation for up to 18 Mtpa through the North”?
3. What “additional applications to regulators” and “appropriate approvals” does BIM understand would be required to increase from 12 to 18 MT per year?
4. Would BIM oppose having specific tonnage limits in a potential Phase 2 approval?

<b>MHTO-BIM-10</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM

<b>Subject:</b>	IQ - Inuit-led programs and initiatives
<b>Question:</b>	

Slide 43 of the Overview Presentation indicates that development of the Inuit Stewardship Program, Inuit Water Quality Monitoring; Culture, Resources and Land Use Monitoring Program; and Pond Inlet Country Food Baseline Study are all under way. Can BIM confirm that these are not yet finalized, and provide draft versions of any materials prepared at this point? If not, please indicate where in development these programs and studies are?

Similarly, on Slide 50 of its IQ presentation, BIM confirmed that the CRLU, Inuit Committee and Inuit Social Oversight Committee have yet to be developed. Can BIM provide details around the actual parameters and terms of each of these initiatives and provide draft versions of materials prepared at this point? If not, please indicate where in development these initiatives are?

<b>MHTO-BIM-11</b>	<b>Public Consultation, IQ, Alternatives Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Alternatives Assessment - Ore vessel fleet
<b>Question:</b>	

What is the maximum sized vessel the current ore loading dock at Milne Port can currently accommodate? What is the average tonnage loaded to BIM's ships during the last 4 years of operations? Note that the MHTO requested the average loaded per ship in 2020 during the January-February Hearing and BIM was unable to provide a response.

During the 2019 Hearing, BIM said that it would require substantial lead time and preplanning to secure ice class vessels, that is, any vessels that would be calling on the project in the shoulder seasons, and it deferred a response to the MHTO's request for details around the vessels that BIM contracted to call for port over the next five years, the sizes of each<sup>1</sup>. No response was provided to that question. During the recent January-February Hearing, BIM was again unwilling to provide an answer when asked how many cape-sized vessels it has contracted for the coming years, and insinuated the questions were irrelevant.<sup>2</sup>

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<sup>1</sup> L. Kamermans, 2019 Hearing Transcript, Vol 4, p 727, lines 15-26.

<sup>2</sup> L. Kamermans, Hearing Transcript, Doc ID 333445, p 118-119, lines 9-26 and 1-24.

The MHTO asks again, considering BIM plans for a 2 year construction season before it would be shipping at increased rates under Phase 2, how many, and of what sizes are the ore carriers BIM has contracted for the coming years (2022-2026)? Specifically, how many cape-sized vessels does BIM currently have contracted for the coming years (2022-2026)?

The FEIS Addendum includes different sizes (DWT) of cape sized vessels for the Phase 2 scope (150,000 and 230,000) - please confirm the anticipated dead weight tonnage(s) of cape sized vessels to be employed by the Phase 2 project and explain where and why different tonnages were employed throughout the impact assessment.

**Atmospheric Environment, Freshwater Environment and Human Health Assessment**

<b>MHTO-BIM-12</b>	<b>Atmospheric Environment, Freshwater Environment and Human Health Assessment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Assessment of Human Health
<b>Question:</b>	

The 2019 Food Security Update indicates with respect to the Quality component of food security, that:

“Project effects to wildlife health are not predicted and the exposure potential of contaminants is low (Sections 7.3.3.3 and 7.3.3.4). Nonetheless, community concerns persist, and such views may result in hunters unnecessarily avoiding the Project area. A low magnitude adverse effect has been designated for these factors based on community perceptions, as they are important to address.”

Has BIM taken samples and assessed snow, ice, and freshwater samples from areas Inuit use for travel, harvesting, and camping (on both terrestrial and marine routes), and confirmed that their consumption, including where dust is observed on these resources, does not pose any human health risk? Where are the results of this work? If this assessment has not occurred, how does BIM justify the medium-high certainty that this is an unlikely impact as identified in the 2019 Food Security Update? Also, without empirical data or IQ confirming that Inuit are able to access necessary freshwater sources to support their activities and that these do not pose a risk to health, how can BIM assert that the impact is related only to community perceptions and not to Inuit experience?

**Terrestrial Environment**

<b>MHTO-BIM-13</b>	<b>Terrestrial Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Caribou and Zone of Influence
<b>Question:</b>	

On slide 35, BIM referenced “Research on Zone of Influence and Disturbance Coefficients.” What further research does BIM feel is required related to zone of influence (ZOI) for the Phase 2 proposal? Please provide details including the timing of that research and any changes that may be required to predicted effects, mitigation, and monitoring based on findings of this research.

Why has BIM not expanded its ZOI beyond 14 km, considering the cumulative effect of road **and** rail infrastructure?

What evidence does BIM have that a 14 km ZOI is not only adequate, but is a conservative estimate, especially considering the transportation infrastructure associated with the Phase 2 development includes both road **and** rail. Please provide references to any Arctic (or other) developments with similar transportation infrastructure (road and rail) that have demonstrated a 14 km ZOI for caribou is adequate.

Please also explain whether the current ZOI will be revised to reflect findings from mine roads elsewhere in Nunavut, to reflect railway-caribou interactions elsewhere in the Arctic, or whether it may be updated to reflect new academic research. Please explain the grounds on which BIM would determine a revision necessary, and the timing for such revisions to be undertaken.

<b>MHTO-BIM-14</b>	<b>Terrestrial Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Caribou - Monitoring
<b>Question:</b>	

Can BIM explain how its current caribou monitoring plans will be able to identify whether caribou are moving away from transportation or other project infrastructure, or that they are impacted by the Phase 2 development?

Why has BIM not considered, or included references to, rail projects and caribou interactions in Canada or in other Arctic jurisdictions (globally) in its effects predictions and proposed mitigation and monitoring plans?

<b>MHTO-15</b>	<b>Terrestrial Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Caribou - IQ regarding railway
<b>Question:</b>	

Slides 8 and 9 of the Terrestrial presentation make references to inclusion of Inuit knowledge and IQ in the consideration of railway infrastructure.

Please confirm whether, following the introduction of the modified Phase 2 scope to include a northern railway, any invitations were extended to community members for focus groups, elders workshops, or other formats of structured IQ gathering sessions where people were specifically invited to share insights about caribou responses to railway infrastructure - specifically in regard to embankment height or slope, tracks, moving trains, whistles, migration, and also to the combined effect of road and rail on caribou. If sessions were held to gather IQ in respect of the northern railway, please provide details, including invitations outlining format and questions to be asked, lists of attendees, lists of questions asked, presentations delivered, comments and questions provided by attendees, and evidence of verification exercises conducted after the sessions to confirm information collected in the context of its use.

With regard to the caribou focus group session held in 2008 - if questions were asked about rail at that time, did BIM follow up to verify with participants from 2008 whether information and their expertise collected at that time was applicable, in their view as the knowledge holder, to the northern railway project and current conditions (considering the time lapsed since the session was held)?

If input regarding railway development was considered from workshops held from 2006-2010, how many participants were from Pond Inlet? Please provide the number of participants from each affected community in attendance at each session.

Does BIM consider information collected in respect of the Steensby Rail project as being adequate to inform its assessment of IQ and impacts related to the northern rail project?

<b>MHTO-BIM-16</b>	<b>Terrestrial Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Caribou - Regional monitoring programs
<b>Question:</b>	

Does BIM collaborate with the GN on regional caribou monitoring programs? If so, are the details of that collaboration public? Specifically, when is the last time BIM contributed financial resources to the GN's program, outside of in-kind provision of goods or support?

<b>MHTO-BIM-17</b>	<b>Terrestrial Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Caribou - Monitoring results
<b>Question:</b>	

How frequently have caribou crossed the tote road since operations began in 2015? Please provide any evidence of caribou crossing, and/or evidence of caribou deflecting or moving away from the tote road since 2015.

What evidence does BIM have that the Tote Road has not presented a barrier or deterrent to caribou since it began operating and moving up to 280 ore truck return trips per day - 560 transits per day - along the Tote Road? Please provide specific details and results of monitoring to demonstrate the road has not served as a barrier or deterrent to caribou movement.

## Marine Environment

<b>MHTO-BIM-18</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Indirect impacts of shipping
<b>Question:</b>	

1. What level of certainty does BIM have that the 400-plus ship transits proposed for Phase 2 over a 4.5 month shipping season will not contribute to increased stress levels, negative changes in body condition, and avoidance of preferred habitat by narwhals? Is there academic literature or other examples of shipping in narwhal habitat which would support BIM's predictions regarding stress levels, changes in body condition, and avoidance of preferred habitat?
2. Does BIM suggest that the 400-plus ship transits proposed for Phase 2 will not be associated with distinguishable impacts to the seal distribution, abundance, reproductive success, and/or habitat selection including overwintering habitat in and adjacent to the shipping corridor? What level of certainty is associated with any

such prediction? Please provide the evidence and studies backing up those conclusions.

During the January-February Hearing, the MTHO asked BIM whether it has confirmed with Inuit, the community of Pond Inlet, or the MHTO regarding how indirect effects of the project may impact narwhal behaviour, such as moving away from areas that are important to harvesting, but which may not have been captured by BIM's monitoring, and, how that has affected Inuit harvesting.

BIM responded that it had tried and had inquired and asked for this information.<sup>3</sup>

3. Can BIM please provide evidence of these inquiries - providing specific letters that have been issued to the community/organizations or minutes from meetings held with the community to answer these questions, as well as data collected.
4. BIM has indicated that IQ informed its baseline and impacts predictions for marine mammals - did that impact assessment consider IQ around indirect impacts to ringed seals including the selection of locations for breathing holes and lairs, from icebreaking?
5. What monitoring of seals' abundance, distribution, and fidelity to overwintering habitat along the northern shipping corridor has BIM collected during the last 3.5 years that it has undertaken shoulder season ice breaking shipping? What collection of IQ has been undertaken in the last 3.5 years to specifically understand impacts on seals from ongoing shoulder season shipping and icebreaking, with regard to abundance, distribution, and overwintering habitat selection in the northern shipping corridor? Please provide clear references and direction to where information can be found about this topic for both BIM monitoring and IQ collection.

<b>MHTO-BIM-19</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Impacts to Ringed Seal from shoulder season ice breaking shipping
<b>Question:</b>	

Does BIM suggest that it is only shipping during key seasons (mating, pupping, nursing, moulting) for seals that would impact their use and fidelity to the RSA?

What information has BIM considered that would suggest Phase 2 shipping and ice breaking during the fall will **not** impact the areas ringed seal select to establish breathing holes and lairs and their subsequent use of these areas later in the winter and spring seasons? Please provide supporting evidence. Does BIM have any Inuit Qaujijmajuqangit that supports this?

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<sup>3</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333451, Volume 7, p 1307, lines 6-9.

Knowing the importance of seal to Mittimatalingmiut, why has BIM not undertaken meaningful monitoring of ringed seal response to current ice breaking activities? More specifically, how has icebreaking and shipping in fall affected the establishment of breathing holes and lairs in and near the shipping corridor?

What degree of certainty does BIM have in suggesting that Phase 2 shipping is unlikely to impact seals' use of the LSA during winter?

What is the enhanced seal monitoring program BIM is proposing under Phase 2; specifically, what are the indicators and thresholds that will be implemented?

<b>MHTO-BIM-20</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Narwhal - Early Warning Indicator(s)
<b>Question:</b>	

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

1. Please confirm that the indicator has been agreed to and accepted by all members of the MEWG.
2. Has the indicator been presented to the NIRB, or to the public for any commenting and/or verification?
3. Please describe the implementation of this indicator to date - BIM suggested that the indicator has been implemented because it has "years of monitoring data to support it." What are the observed results, and where have these been reported?
4. What is the threshold for immature narwhal ratios that trigger adaptive management responses? Where are these responses detailed in adaptive management plans? What mitigation measures will be implemented when a threshold is exceeded?
5. Can BIM clearly demonstrate how the immature narwhal ratio is an EWI? How long will it take to detect a change that is outside the bounds of natural variation?
6. From the monitoring data that BIM has to support the selection of this indicator, what are the trends that have been noted? Where is this information documented?

7. How many years of data and results would be required to identify an impact? How would BIM determine with any degree of certainty that project interactions are responsible for changes in juvenile/calf ratios over the years?
8. What IQ was involved in selecting this indicator, specifically community level input that was solicited outside MEWG meetings?

<b>MHTO-BIM-21</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Narwhal indicators of change
<b>Question:</b>	

BIM also indicated during the January-February Hearing that it looks at

*“...multiple different response variables related to behavioural disturbance specific to shipping. This allows us to tell if we are having an impact on animals at the project level. At a higher level, we track changes in reproductive output of narwhal as well as potential changes in the stock size, as previously mentioned, to also give us an idea on the health of the population that could be attributable to the project in combination with other cumulative effects. That paints a picture of how narwhal are doing in the ecosystem when we see changes. At the reproductive or stock level we're able to cross-reference to our more specific studies looking at behaviour and determine whether that's project-driven or not.”<sup>4</sup>*

Please explain how changes in reproductive output provide a reliable warning indicator for health of the population?

Please clarify which of BIM's studies in this instance are referred as the “*more specific studies looking at behaviour and determine whether that's project driven or not,*” and please clearly explain how BIM is able to determine what is or is not a project driven change in behaviour and/or specific indicator?

During the January-February Hearing, BIM stated:

*“We have low-level, moderate-level, and high-level indicators which allow us to track whether there's changes occurring in the narwhal population as a whole from project effects in combination with other effects, but we also have more refined indicators and thresholds that allow us to track potential changes in narwhal behaviour and by extension narwhal population that are specific to the project; that is to say, project*

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<sup>4</sup> P. Rouget, Hearing Transcript Doc ID 333450, Volume 6, p 1060, lines 1-18.

*derived. We feel this is an adequate approach to characterizing project effects and dissecting them from pressures ongoing on the animals from other sources.”<sup>5</sup>*

Please identify the the low, moderate, and high level indicators referenced, including the thresholds to determine change for each, and also identify the “more refined” indicators and thresholds referenced in this statement.

Please clearly explain how BIM is able to characterize project effects to narwhal and distinguish these from pressures to the animals from other sources?

<b>MHTO-BIM-22</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Marine mammal harvesting
<b>Question:</b>	

1. Does BIM agree that monitoring the impacts of its project on the Inuit harvest of narwhals, seals, and Arctic char is important?

During the January-February Hearing, BIM agreed that adaptive management plans and EWI for impacts to Inuit harvesting should be developed and incorporated into its own plans rather than those of a yet-to-be developed Inuit Committee. It also indicated that existing indicators are built into its adaptive management plan and other marine and terrestrial management and monitoring plans.<sup>6</sup>

2. What are the existing early warning indicators for impacts to Inuit harvesting (per level effort) of seal and narwhal that are included in BIM’s adaptive management plan, marine and/or terrestrial management and monitoring plans, and have these been implemented?

When asked during the January-February Hearing whether a decrease in narwhal harvest numbers could be attributed to the project over time, BIM responded that it could not, and would require further investigation.

3. What further investigation does BIM suggest is required, and what further investigation is BIM willing to undertake to collect information that would assist in answering this question? Will BIM complete this work before Phase 2 is operational?

4. Please explain how BIM has arrived at a high degree of certainty for impacts of the project on Inuit harvest of narwhal, seals and fish, specifically when data on the harvest per level effort has not been considered?

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<sup>5</sup> P. Rouget, Hearing Transcript Doc ID 333450, Volume 6, p 1059, lines 18-26.

<sup>6</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333451, Volume 7, p 1341-42, lines 22-26 and 1-2.

<b>MHTO-BIM-23</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Marine Environmental Effects Monitoring Plan and Adaptive Management
<b>Question:</b>	

The most updated version of BIM's Marine Environmental Effects Monitoring Plan (MEEMP) is from 2016 (as confirmed by NIRB in an email from C. Barker to A. Hanson Main, 11 January 2021) and has not been updated to reflect project or monitoring changes that have occurred since 2016. Questions related to the MEEMP are as follows:

1. Why has the MEEMP not been updated since 2016, especially since the MEEMP states *“The document will be modified on a regular basis, likely annually, as results from monitoring programs are analysed and assessed.”*
2. Why was the MEEMP not modified to including monitoring for the effects of icebreaking activities on narwhals and seals during the shoulder seasons of 2017 (end of season only), 2018, 2019, or 2020?
3. Based on the results of the 2015 marine mammal monitoring program and the adaptive management steps outlined in the MEEMP (2016), provide explanation of why further mitigation and monitoring was not triggered that year?
4. Please identify – specifically - where the MEEMP has considered effects of the Project on the Inuit harvest of narwhals and seals?
5. In light of the impacts on narwhal and seal observed by Inuit, why has the MEEMP not been updated to reflect these findings?
6. Where is BIM’s scientific assessment of the effectiveness of the mitigation measures and adaptive management measures proposed to avoid or lessen impacts to narwhal and seal, and to Inuit harvesting rights?

<b>MHTO-BIM-24</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Uncertainty Around Future Monitoring and Ability of the Project to Implement Change
<b>Question:</b>	

Can BIM provide detailed plans and analyses as to how shipping of ore can be constrained (including quantification of shipping level reduction) by identified adaptive management requirements for marine mammals and their harvest, and still manage to achieve production targets and economic viability for the Project?

What are the minimum levels of shipping BIM could return to after a slow down or shut down, while still managing to maintain economic viability for the Project?

<b>MHTO-BIM-25</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Environmental Assessment Methodology
<b>Question:</b>	

What is the exact definition of a significant effect for marine mammals used in the Phase 2 assessment?

How does the effects assessment procedure specifically consider effects of the Project on narwhal critical life functions (calving, nursing, and foraging) which are known to occur in the LSA?

Where and how in the EA methodology were effects on narwhal and seal harvesting directly accounted for and how specifically did the Phase 2 FEIS Addendum consider the significance of effects on narwhal and seal harvesting?

<b>MHTO-BIM-26</b>	<b>Marine Environment</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Uncertainty of Effects Predictions
<b>Question:</b>	

BIM predicted that “*between 29 and 39% of the Eclipse Sound narwhal summer herd stock*” could be disturbed by a single ice breaking transit. How do these predicted disturbance estimates translate into effects on Inuit harvest of narwhals? Where is this analysis in the Phase 2 Addendum? How did the analysis incorporate IQ?

1. During BIM’s Marine Presentation, it noted that the 120 dB sound level criterion was considered the “gold star” for impact assessment. Please provide specific evidence that this statement is applicable to narwhals.
2. During BIM’s Marine Presentation, it noted several times that uncertainty in effects predictions were addressed through conservative assumptions in the assessment. Related to this, what scientific evidence and IQ specific to narwhal were used to conclude that assumptions in the effects assessment are conservative.
3. How were the findings of BIM’s marine mammal and acoustic monitoring, which have been undertaken for seven years, used to validate the behavioural thresholds (120 dB and 135 dB) used in the Phase 2 assessment?

4. Where in the Phase 2 Addendum are the impacts of multiple, repeated vessel passages, day after day, on narwhals considered?

### Socio-Economic / Food Security Update

<b>MHTO-BIM-27</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Resources and Land Use VSEC - harvesting interactions
<b>Question:</b>	

Can BIM confirm the applicability of the following statement from section 9.3.2 of TSD 24 (Phase 2 FEIS Addendum) regarding Resources and Land Use to the Phase 2 assessment:

*“Potential effects on sustainable resources use, such as country food availability, accessibility of carving stone, and traditional clothing in the context of general effects to wildlife and harvesting, were assessed as part of the FEIS (Volumes 4 and 10). The Phase 2 Proposal does not present new mechanisms of interaction; therefore this is not further assessed in the current document.”*

Please confirm that the reference to the FEIS (Volumes 4 and 10) made here is referring to the initial FEIS filed with the NIRB in 2012 for the original Mary River project proposal?

The 2017 Socio-Economic Monitoring Report included within TSD 24 indicates that “No specific prediction related to Project harvesting interactions and food security was presented in the FEIS.” Please confirm that this reference is again to the 2012 FEIS for the Mary River project?

<b>MHTO-BIM-28</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Resources and Land Use VSEC - Monitoring harvesting and land use
<b>Question:</b>	

The 2019 Food Security Assessment suggests that a number of new indicators may be developed and implemented to monitor food security - specifically of interest to the topic of harvesting includes a measure of "Community harvester participation and/or success rate" that would be used "To assess whether harvester participation and/or success rates are changing."

1. Please indicate which new indicators will in fact, be developed and implemented, and on what factors their development and implementation are to be based?
2. Why have indicators not been implemented and why has this information not been gathered under the approved and ongoing project operations?
3. Can BIM explain what its role would be in collecting and analyzing this information, when it anticipates this monitoring to commence, and how it would compensate for the fact that there is currently no (or limited) baseline information available on this indicator? Please also provide proposed thresholds for change and what adaptive management or mitigation measures would be implemented if these thresholds were exceeded. What is the projected time lapse until such a point that monitoring may be able to document a trend and what certainty is required that any such changes or trends be attributed to project impacts?

During the January-February Hearing, the MHTO asked BIM whether it had held specific workshops or interviews or done any qualitative research with the Mittimatalik hunters or those from other communities about harvest effort. The MHTO asked whether BIM had inquired about the distance hunters must travel, number of hours, days or weeks spent, the success rate per unit effort, the value per catch, the weight or volume of muktaq harvested, presence and size of tusk, etc.

BIM responded that it has inquired about some of these considerations, that it has asked for data to help it better understand the impacts to the community.<sup>7</sup>

4. Where specifically is that information provided within the FEIS Addendum or supporting documentation, and where and how has BIM inquired about these considerations, and which these specific considerations did BIM inquire about?

<b>MHTO-BIM-29</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Resources and Land Use VSEC - harvesting interactions, marine mammals
<b>Question:</b>	

TSD 25 indicates that the Approved Project assessment considered impacts to marine mammal harvesting by Inuit in terms of impacts to marine mammal populations or harvesting activities, and that the assessment concluded that effects would be negligible. Further, TSD 25 indicates that since the Project is not predicted to result in decreases in marine mammal populations, Phase 2 Proposal is unlikely to affect the harvesting of marine mammals.

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<sup>7</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333451, Volume 7, p 1293, lines 22-26.

1. Was a specific prediction related to Project harvesting interactions and food security relevant to marine mammals included within the original Mary River FEIS? If so, what was it, and please provide references. Was a prediction related to Project harvesting and food security specific to marine mammals included within the FEIS Addendum, TSD 25 or the Food Security Assessment? Please provide references.
2. TSD 25 indicates that in addition to providing compensation for lost harvests due to the Project through the Wildlife Compensation Fund (WCF), a number of additional mitigation measures have been incorporated into planning of the Phase 2 Proposal including eliminating trans-shipping and the winter sealift, and concentrating shipping within the open water and shoulder shipping seasons.
3. Please explain how eliminating trans-shipping and winter-sealift, and concentrating shipping within the open water and shoulder seasons mitigates for impacts to Inuit harvest of marine mammals - including ringed seals and narwhal particularly.

BIM could not provide the number of claims filed under the WCF during the January-February Hearing.<sup>8</sup>

4. To confirm, BIM does not track the number of unsuccessful hunts?
5. Why is this information not collected or considered by BIM?
6. Why does BIM not track claims submitted and the outcome of those claims in terms of the Wildlife Compensation Fund?
7. Does BIM suggest that the Wildlife Compensation Fund is a measure that mitigates potential impacts to harvesting?

<b>MHTO-BIM-30</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Resources and Land Use VSEC - harvesting interactions, fish
<b>Question:</b>	

With respect to fish, TSD 25 refers to the assessment from the Approved Project, noting that local residents focused their fishing efforts at streams and lakes containing anadromous Arctic char, and that lakes and streams in the Project area contain land-locked Arctic char populations only. For this reason, the previous assessments concluded that the effects on harvesting of fish would be negligible.

Can BIM confirm the definition for those “lakes and streams in the Project area” within which local residents focus their fishing efforts - specifically, is this relating to the Mary River mine site, or does it also extend to the Milne Port, Tote Road, Steensby rail route, and/or Steensby Port?

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<sup>8</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333451, Vol 7, p 1300-1301, lines 26 and 1-3.

Are “local residents” referred to in section 9.3.2 of TSD 25 people from Igloolik, Sanirajak, Pond Inlet, Arctic Bay, or Clyde River? Please clarify and provide references to specific consultation sessions or feedback which was relied upon to make the statement in TSD 25 referred to in the first paragraph of this section above.

Do Inuit from impacted communities - and specifically Pond Inlet - focus any of their fishing efforts at lakes and streams in the Project area, or are they focused specifically on anadromous fish, and presumably elsewhere? How has BIM confirmed this? If elsewhere, please describe those lakes, rivers, and areas. How has BIM confirmed that Inuit harvest of landlocked and/or anadromous fish have not, and will not, be impacted by currently approved or proposed (Phase 2) project activities?

<b>MHTO-BIM-31</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Resources and Land Use VSEC - harvesting interactions, caribou
<b>Question:</b>	

Section 9.3.2 of TSD 25 indicates that the assessment for the Approved project considered impacts to the ability of Inuit to harvest caribou by assessing population level effects to caribou, or restrictions on caribou harvesting. The assessment found that residual effects of the Approved Project on caribou harvesting was not significant.

Did BIM’s assessment determine that the northern railway combined with the Tote Road would not present any new mechanisms of interaction for impacts to caribou and/or Inuit harvesting of caribou?

Has BIM considered the cumulative effects of the Phase 2 development on caribou harvesting, including harvesting quotas implemented for Baffin Island caribou?

<b>MHTO-BIM-32</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	CRLU - Impacts to Harvesting Marine Mammals
<b>Question:</b>	

BIM TSD 25 Section 9.7.2 Table 9.4 lists 132 ore carriers, and a total of only 140 project vessels (132 ore carriers, 4 fuel, 4 resupply ships) for Phase 2. No mention of ice breaker ship transits was included in this information. From the Hearing in January-February, BIM clarified that these numbers were varied throughout its numerous assessments.

BIM has suggested that the Phase 2 Proposal will not result in adverse effects to marine mammals according to the marine mammal assessment, and that the Phase 2 Proposal is unlikely to affect the harvesting of marine mammals.

1. Does this prediction remain accurate given the substantially fewer number of ships, and omission of ice breaker shipping contemplated by the assessment in TSD 25 of the FEIS Addendum?
2. What is the current (operating) project’s effect on harvesting, including the effort and experience of Inuit hunters? How does BIM currently measure and assess project-harvesting interactions, and impacts to harvesting and/or food security?
3. BIM’s TSD 25 notes that “with the appropriate mitigation in place, the potential impact on the quantity of marine mammals harvested by level of effort is determined to be of low magnitude and is evaluated to be not significant.”
4. Please explain how BIM measured/measures harvesting by level of effort? What is the source of BIM’s baseline data for the quantity of marine mammals (narwhal, seal, other whales, walrus) harvested by level of effort, what monitoring of this indicator is ongoing, and where is this information detailed?
5. Please provide specific details setting out how BIM plans to assess impacts to harvesting per level effort under a potential Phase 2 scenario.

<b>MHTO-BIM-33</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Impacts to Harvesting - Caribou
<b>Question:</b>	

BIM TSD 25 Section 9.7.2 indicates that:

“...linear infrastructure (such as the rail) can block movement or cause caribou to change movement routes...Given the limited range and low populations of caribou currently present in the Terrestrial Regional Study Area (TRSA), the interaction between caribou and the rail and road is expected to be limited.”

“During the operation phase, the effect on the ability of Inuit to harvest caribou will remain unchanged in comparison to the FEIS assessment. The Phase 2 Proposal is not predicted to require Inuit to exert additional effort or cause difficulty in harvesting caribou under most circumstances. If this does occur, compensation is available to hunters under the WCF. As a result, the Phase 2 Proposal is predicted to have a low magnitude adverse effect on the harvesting of caribou.”

BIM’s 2017 Socio-Economic Monitoring Report included within the FEIS Addendum noted a possible Residual Effect for the “Resources and Land Use” valued component, however Table 1-1 of this report indicated that monitoring of the indicator - quantity of

caribou harvested per level effort, was not applicable. It states that “Potential effects on caribou will continue to be tracked through Baffinland’s terrestrial wildlife monitoring program.”

Please explain how monitoring impacts to caribou is a satisfactory method to assess impacts on the Resources and Land Use indicator, namely “Quantity of caribou harvested per level of effort”? Please describe any other information considered in BIM’s assessment of this indicator to date.

What information has BIM collected regarding caribou harvest per level of effort for Mittimatalingmiut, and where is this information detailed?

Which other affected communities harvest caribou throughout the Regional Study Area? Provide references supporting these conclusions.

<b>MHTO-BIM-34</b>	<b>Socio-Economic / Food Security Update</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Socio-Economic, Food Security - Perception of risk
<b>Question:</b>	

Testimony regarding psychosocial impacts Inuit have felt was provided during the January-February Hearing. Specific concerns regarding the impact of iron ore dust on freshwater resources (snow, ice, and water used for human consumption) while undertaking land-based activities, and impacts of this dust to the food web (i.e. benthic organisms, fish, mammals) were raised. In addition, during the Community Roundtable in Pond Inlet, residents noted that Inuit may be purposefully avoiding introducing country foods to their children.

Where in its materials, with specific references, has BIM considered psychosocial impacts of its project on Inuit perception of risk and the resulting impacts to traditional and land-based cultural practices including, but not limited to: hunting, fishing, camping, country food consumption, skin preparation and traditional sewing?

### **Adaptive Management, Management Plans and Monitoring Program**

<b>MHTO-BIM-35</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Adaptive Management - Impacts to Harvesting
<b>Question:</b>	

If Inuit felt they were going to lose their culture, or lose the ability to harvest due to Phase 2, what are the specific “checks and balances” that would be implemented to see BIM’s operations stopped and closed to ensure that would not happen?

What level of certainty is BIM suggesting must exist in order to determine if the project is having an impact on wildlife? On Inuit harvesting? On Inuit culture? What are the thresholds and indicators that BIM has proposed to assess these impacts?

How does BIM currently monitor for impacts on Inuit harvesting (indicators, thresholds, monitoring programs undertaken)? What about monitoring the presence, vibrancy, and/or practice, of Inuit culture? What are the indicators, thresholds, and monitoring programs that have undertaken to date in this regard? What are the findings of this monitoring.

<b>MHTO-BIM-36</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Adaptive Management - Indicators
<b>Question:</b>	

BIM made repeated references during the Hearing to Inuit-specific indicators related to monitoring. BIM also indicated in its slides that these would take approximately 8 months to develop, and that they would be in place in August 2021.

1. How will Inuit indicators fit within BIM’s own project specific monitoring programs? Please provide specific examples.
2. If BIM’s monitoring programs are not able to address indicators that are important to Inuit - say, body condition of narwhal, or abundance of seal birth lairs, or Arctic char health in a particular lake of interest - are Inuit to undertake the associated monitoring? And based on these Inuit indicators, and monitoring programs, Inuit would be required to demonstrate an effect from the Project?
3. If Inuit and BIM agree on certain indicators, how will thresholds be determined - for example, if 10% of a population change is BIM’s preferred threshold to determine impact, but Inuit thresholds are much more sensitive, how will these differences be resolved? Which threshold would then apply to the project monitoring?
4. Will BIM integrate monitoring data collected through the Inuit Stewardship Program into its own assessment of project monitoring data and impacts? Has BIM committed to integrate this data? If not, why not?

<b>MHTO-BIM-37</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
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<b>Directed to:</b>	BIM
<b>Subject:</b>	Adaptive Management - Shipping levels
<b>Question:</b>	

Can BIM explain how its plans to ship ore can be constrained by adaptive management requirements, including a potential and sustained reduction in shipping levels, to address impacts to marine mammals and Inuit harvesting?

What are the minimum levels of shipping BIM could return to after a slow down or shut down, while still managing to maintain economic viability for the Project?

<b>MHTO-BIM-38</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Adaptive Management - ICA
<b>Question:</b>	

Under the ICA, Schedule A, section 1.3.2(g), BIM is required to “Work with QIA to integrate the draft and final Inuit Stewardship Plan with the Adaptive Management Plan and IIBA implementation as appropriate, include development and integration of appropriate thresholds, trigger and actions for both the CRLU and Social Streams into the Adaptive Management Plan.”

1. Has the ISP been integrated into the AMP? Is the AMP completed?
2. Further, please indicate which “appropriate thresholds, trigger and actions” have been developed for a) the CRLU; and b) the Social Streams, and integrated into the AMP.

Under the ICA Schedule A, section 1.4, QIA and BIM are identified as jointly responsible “for approving the Adaptive Management Plan and adaptive management actions included within other Project-related plans (identified in Section 3)”.

3. What if BIM does not approve the AMP and/or adaptive management actions? Can one party be forced into arbitration by the other party to resolve the matter?

The ICA Schedule A, section 2.1.3 states “The parties agree certain adaptive management responses may challenge the overall scope, scale and viability of the Project and therefore a higher degree of certainty that the Project is reasonably associated with the effect is required.”

4. How will the “high degree of certainty” that the Project has caused an effect before triggering an adaptive management response be determined?

<b>MHTO-BIM-39</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	ICA Implementation Plan
<b>Question:</b>	

Under section 4.1 of the ICA, the parties commit to “Not later than June 30, 2020, an implementation plan for the implementation of all obligations set out in this Agreement shall be approved by the parties.”

Has the implementation plan been completed, and will you provide it to the MHTO?

<b>MHTO-BIM-40</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	ISP, Inuit Committee and ICA
<b>Question:</b>	

Under section 1.1.2 of Schedule A of the ICA, , the “ISP will be presented to Baffinland for feedback prior to QIA’s finalization and approval”. Is QIA required under the ICA to incorporate BIM’s feedback, or could QIA ignore the feedback?

<b>MHTO-BIM-41</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	ICA - plan development
<b>Question:</b>	

The ICA, Schedule A, section 2.2.5 indicates that the parties agree “Work on the Marine Monitoring Plan and Aquatic Effects Monitoring Plan will be prioritized. Parties further agree to come to joint approval of an initial set of objectives, indicators, thresholds and responses for these plans within 90 days of signing the Inuit Certainty Agreement, unless otherwise agreed. The parties agree to also continue work on the Surface Water

Aquatic Ecosystem Management Plan, Waste Management Plan, Borrow Pit and Quarry Management Plan, Snow Management Plan and Road Management Plan with a focused and concerned effort to come to agreement on initial objectives, indicators, thresholds and responses for each plan within 90 days.”

1. Are either of the Marine Monitoring Plan or Aquatic Effects Monitoring Plan complete?
2. Please describe what the “initial set of objectives, indicators, thresholds and responses” for these plans are and where these are filed.
3. Are any of the Surface Water Aquatic Ecosystem Management Plan, Waste Management Plan, Borrow Pit and Quarry Management Plan, Snow Management Plan or Road Management Plan complete?
4. Please describe what the “initial set of objectives, indicators, thresholds and responses” for these plans are and where these are filed.

<b>MHTO-BIM-42</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	Culture Resources and Land Use (CRLU) Assessment
<b>Question:</b>	

1. What is the purpose of the CRLU assessment in the ICA?
2. Does the BIM view the CRLU Assessment as an important tool for the collection of IQ related to Phase 2?
3. When does BIM expect results of the CRLU Assessment will be available?
4. Please provide a rationale for completing a CRLU Assessment only after Phase 2 is approved, considering the position outlined in ICA ID 6, section 6.1.1 which indicates that “Baffinland’s Final Environmental Impact Statement (FEIS) underestimated impacts to Culture, Resources and Land Use (CRLU)” and that “QIA and the North Baffin communities have not found Baffinland’s current findings credible.”
5. Would BIM agree that many Inuit believe that impacts to harvesting have not been adequately considered by BIM’s assessment to date?

<b>MHTO-BIM-43</b>	<b>Adaptive Management, Management Plans and Monitoring Program</b>
<b>Directed to:</b>	BIM
<b>Subject:</b>	ICA - Adaptive Management
<b>Question:</b>	

Section 2.1.3 of the ICA ID 2 states: “The parties agree certain adaptive management responses may challenge the overall scope, scale and viability of the Project and therefore a higher degree of certainty that the Project is reasonably associated with the effect is required.”

1. What specifically, are the “certain adaptive management responses” to which this clause of the ICA applies?

In addition, ID 2, section 2.1.13 states: “Understanding High Action Level responses may challenge the overall scope, scale and viability of the Project, a higher degree of certainty that the Project is reasonably causing the effect and that the High Action Level response is appropriately designed to reverse the effect is required.”

Section 2.1.11 also indicates that “adaptive management will be applied where an adverse effect has been identified through project monitoring...” and 2.1.12 notes: “The parties agree that reasonable adaptive management responses will be applied appropriately to deal with identified materially adverse effects even when it is not possible to determine with complete certainty the degree to which the Project is contributing to the total effect observed. This Valued Component-centred approach is critical to maintaining the values Inuit have in the Project affected area.”

2. Can BIM clarify which adaptive management responses will be implemented per 2.1.12 and which will be exempted via 2.1.3 and 2.1.13?
3. Which effects does BIM suggest can be measured and identified per 2.1.11 and 2.1.12, especially based on monitoring which may not have the ability to detect project level effects?
4. BIM’s Adaptive Management Plan indicates a Review of Monitoring Program Results will be undertaken against Predetermined Indicators and Thresholds. What are these indicators and thresholds? What monitoring program results have been, or will be, utilized in this review? When is this review anticipated to occur?

## Questions to Nunavut Tunngavik Inc.

<b>MHTO-NTI-01</b>	
<b>Directed to:</b>	NTI
<b>Subject:</b>	Narwhal - Early warning indicator
<b>Question:</b>	

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

1. Would NTI agree that this is an acceptable EWI? Does NTI agree that this is an adequate and appropriate indicator to demonstrate an early warning for project related effects to narwhal?
2. Does NTI have any idea or prediction in terms of the time that would be required with consistent monitoring to identify changes in this indicator (i.e. 2 years, 4 years, etc)?
3. Is it possible that other factors could contribute to changes in juvenile-calf ratio?
4. How likely is it that changes in this indicator could be linked to project effects from shipping?
5. How much variability in population surveys is expected, and how does that translate into certainty about results of juvenile-calf ratio in the Eclipse Sound stock?
6. Would NTI suggest that the Eclipse Sound stock size is a suitable indicator of population health?
7. What other early warning indicators would NTI suggest be adopted by BIM to monitor for impacts to narwhal?

<b>MHTO-NTI-02</b>	
<b>Directed to:</b>	NTI
<b>Subject:</b>	Narwhal - Eclipse Sound stock, impacts
<b>Question:</b>	

Would NTI agree that the Eclipse Sound Stock population numbers are stable?

Does NTI agree that monitoring population level impacts may not be a sensitive enough measure to take into account changes that are important to Inuit or changes that are noted according to IQ?

Would NTI agree that by the time population level impacts are seen, Inuit harvesting may have already been significantly impacted?

<b>MHTO-NTI-03</b>	
<b>Directed to:</b>	NTI
<b>Subject:</b>	Impacts to narwhal
<b>Question:</b>	

During the January-February Hearing, BIM indicated it had a “predominantly western science-based program running, and they're telling us one story about narwhal and wildlife. They're telling us that -- that abundance in the population is -- is stable from before the project and during the project. They're telling us that narwhal will react to -- to the ships when they see them. They'll swim away, but they'll come back.”<sup>9</sup>

Would NTI suggest that BIM’s monitoring program(s) have adequately and with certainty shown that narwhal abundance and the population is stable compared to pre-project shipping and now, during project operations? Please explain.

Would NTI also suggest that BIM's program(s) adequately and with certainty demonstrate that narwhal will react to ships when they see them by swimming away, but that they will come back? Please explain.

NTI’s February 4, 2021 submission on narwhal stated that “If the impacts can be appropriately mitigated, the evidence points to the need for increased monitoring, and effective thresholds and adaptive management responses to mitigate impacts on narwhal.”

Would NTI agree that the Phase 2 proposal as submitted is sufficiently developed to appropriately mitigate impacts to narwhal? Please explain.

<b>MHTO-NTI-04</b>	
<b>Directed to:</b>	NTI
<b>Subject:</b>	Ringed seal - indirect impacts
<b>Question:</b>	

1. Does NTI consider ship strikes to be the primary potential impact of icebreaking and shoulder season shipping ongoing currently, and as proposed for Phase 2?

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<sup>9</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333453, p. 1605, lines 11-17.

2. Would NTI also suggest it is necessary to assess indirect impacts of shipping in shoulder seasons?
3. BIM has determined that its project will have no significant impact to seal, or to Inuit harvesting of seal because it will not ship in sensitive life periods for seals (breeding, pupping, nursing). Does NTI agree with this determination?
4. Does NTI agree that shipping in the fall shoulder season may have effects on seal's fidelity to the RSA during winter months, that is, seal may select other habitat to develop breathing holes and dens?

<b>MHTO-NTI-05</b>	
<b>Directed to:</b>	NTI
<b>Subject:</b>	Caribou
<b>Question:</b>	

Is NTI confident in BIM's assessment of caribou, and its predictions of no significant impact to caribou, and no significant impact to Inuit harvesting of caribou?

<b>MHTO-NTI-05</b>	
<b>Directed to:</b>	NTI
<b>Subject:</b>	Inuit harvesting
<b>Question:</b>	

Please explain NTI's role with respect to harvesting rights of Inuit under the Nunavut Agreement, and whether NTI's participation in the assessment of major project developments includes a consideration of harvesting rights and potential impacts to these rights, or to wildlife and natural resources (i.e. freshwater) upon which Inuit depend to exercise those rights.

Is NTI satisfied with BIM's assessment of impacts to Inuit harvesting under the current project? Please explain.

Does NTI agree that Phase 2 may significantly impact Inuit harvesting of marine mammals, caribou, and fish?

## Questions to Qikiqtani Inuit Association

<b>MHTO-QIA-01</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Project effects
<b>Question:</b>	

Does QIA agree that the Mary River is an established project where the effects are well understood compared to a new operation? If so, please clarify which effects of the existing project it suggests are well understood?

1. How well have the mitigation measures and environmental strategies proposed under the Project Stabilization Approach addressed impacts from the additional throughput and transportation of ore under the Production Increase?
2. Is the QIA of the opinion that BIM has rectified information deficiencies on the potential long term impacts of increased shipping, primarily to marine mammals, and that it has proposed adequate and detailed monitoring programs and mitigation measures to effectively ensure impacts are identified, avoided, mitigated and/or managed?
3. Based on QIA's assessment to date, has Baffinland adequately demonstrated that dust generated from railway operations will be significantly less than that from the road operations, and what mitigations will be employed if effects are greater than anticipated?

<b>MHTO-QIA-02</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Northern Railway
<b>Question:</b>	

Does the QIA believe that HTOs and Hamlets in the impacted communities, and in Pond Inlet specifically, support the development of a Northern Railway transportation option for Mary River? If yes, please provide references and documentation supporting that view (meeting minutes, records of workshops, motions or resolutions, etc.).

Has QIA, by way of the ICA, confirmed its support for, or selection of, railway option "Route 3"? If yes, please explain what factors were considered and how the QIA justifies that determination. If not, please explain why QIA agreed to the ICA which included a commitment to Route 3,<sup>10</sup> and please provide any specific references to

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<sup>10</sup> Inuit Certainty Agreement, ID 8, section 8.1.2.

public community engagement, meeting minutes, or resolutions/motions from community organizations which support that justification.

<b>MHTO-QIA-03</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Collection and consideration of IQ
<b>Question:</b>	

In 2019, QIA requested that BIM collect additional IQ. Please describe the quality and quantity of IQ that has been collected since the March 2019 response to Technical Review Comments.

Does QIA do its own verification of IQ after conducting collection workshops or meetings? If so, please describe this process; if not, please explain why not.

Given concerns expressed by QIA, the MHTO and others, is QIA confident that BIM has conducted adequate IQ collection to support moving forward with Phase 2 at this time?

Does QIA believe that the IQ collected adequately allows for identification and assessment of all indirect impacts of importance to Inuit?

<b>MHTO-QIA-04</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	ICA Implementation Plan
<b>Question:</b>	

Under section 4.1 of the ICA, the parties commit to “Not later than June 30, 2020, an implementation plan for the implementation of all obligations set out in this Agreement shall be approved by the parties.”

Has the implementation plan been completed, and can you provide it to the MHTO?

<b>MHTO-QIA-05</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Outstanding and unresolved matters
<b>Question:</b>	

On June 14, 2019, the QIA sent a letter to the Board re: Tusaqtavut study

On page 3, in describing the purpose the study, the QIA says:

The Proponent has not, over five years into the operations of the Project, set up a proper spatial data collection program for Inuit use and occupancy. The Proponent has yet to set up a proper, fulsome community-based monitoring program, nor has it assessed impacts of changes since the Project commenced operations from an Inuit perspective.

The Study illustrates that the Proponent may have underestimated the Project's impacts on Inuit culture, land and marine use and the resources Inuit rely on. (page 3).

The Proponent has not treated these concerns properly. Instead, Inuit concerns have often been recorded in Proponent-led meetings, but in the end they don't often seem to make a difference in project planning, effects estimation, or mitigation and monitoring implementation. (page 4)

The letter suggests that further work must be done, including:

Assessment of effects on Inuit culture, resources and land use from the Phase 2 Proposal, alone and in combination with other past, present and reasonably foreseeable future cumulative effects causing agents, including reconsideration of significance of those effects with an Inuit lens; (page 5)

The MHTO raises the following questions based on this, and on QIA's July 7, 2020 letter ("the Letter") to the NIRB. In the Letter, you say that 48 of 53 QIA concerns are resolved. On page 2 of the letter, under the heading "Key Resolved Set of Issues: Inuit Committee and Inuit Stewardship Plan" QIA suggests that it will develop an Inuit Stewardship Plan (ISP), that will be the primary mechanism through which Inuit actively manage and report on impacts related to the Mary River Project.

1. Please confirm that no ISP was developed when the ICA was signed, and that there is still currently no ISP to date?
2. Has the Inuit Committee been formed or does all of the work under this section of the letter remain to be done after Phase 2 approval?
3. Is the ISP – which will be completed after Phase 2 is approved – the tool by which QIA/BIM propose to integrate Inuit monitoring activities into the adaptive management system?
4. Is it QIA's intention that specific concerns will be resolved by the formation/creation of the ISP and Inuit Committee? If so, which concerns does QIA anticipate will be addressed? How can QIA be certain that those particular concerns will be addressed when the ISP and Inuit Committee do not yet exist?

The Letter also references “Key Resolved Set of Issues: Adaptive Management”, indicating that “QIA and Baffinland will jointly develop and approve the Final Adaptive Management Plan (AMP) and sub-plans. A number of unresolved technical issues for the Project involve the AMP process.”

5. Please confirm that the AMP had not been finalized at the time of signing of the ICA, and that the finalized AMP is yet to be developed?
6. Under this particular section, which issues are actually resolved now, and which concerns will be resolved at a later date once the AMP process is final?
7. When QIA says in the Letter that a number of unresolved technical issues involve the AMP process, is this indicating that the issues will be dealt with at a later date by the AMP process, post-Phase 2 approval? If so, which issues does QIA anticipate will be addressed by the AMP process? How can the QIA be certain that those particular concerns will be addressed when the AMP is far from being finalized?

The Letter also references “Key Resolved Set of Issues: Culture, Resources and Land Use Monitoring.”

8. Please confirm that the CRLU Monitoring program is a future program, which is not operational currently, and for which monitoring is proposed to be done after Phase 2 is approved?
9. Is there, or has there been, any CRLU monitoring by Inuit on the currently approved BIM operation?
10. Many of the project impacts will be acutely experienced by Mittimatalingmiut: can QIA confirm that Mittimatalingmiut have agreed to do the monitoring proposed under the CRLU program?
11. Also in the Letter, QIA notes its marine environment concerns have not been resolved. Are they still unresolved, and what are those unresolved concerns specifically?
12. Despite the fact that all of the details and final work on these plans will happen after Phase 2, why did QIA advise the NIRB that the Impact Assessment process was ready to resume (page 4 of the Letter)?
13. In Schedule B of the Letter, QIA NIRB Technical Comment’s 1-9 and 53 are listed as “Resolved, Contingent on ICA implementation.” However, if the ICA is not implemented, these concerns would remain unresolved? Are any of these concerns embedded under the three Letter headings discussed above?
14. In Schedule B of the Letter, QIA NIRB Technical Comments 41-44 and 51 are listed as “Outstanding”. Are these the Marine concerns identified in the letter, and if so, what are these concerns?
15. QIA NIRB Technical Comment’s 45 and 48 are listed as “Partially Resolved”. Please describe how the technical concerns are partially resolved.
16. What is the Pond Inlet Country Food Baseline? Has the Pond Inlet Country Food Baseline been completed or is this something that will be done after approval of Phase 2? (referenced in Letter and ICA-SA-7)

17. Under Article 5, sub 5.6(c) of the ICA, this section says that if QIA is satisfied with BIM progress on various schedules, developing those plans etc, AND adequate consensus exists in communities (5.6(d)), then QIA recommends approval. Does QIA believe consensus exists in the communities at present?
18. Finally, section 5.2 of the ICA indicates that QIA will recommend that the hearing resume “provided that the parties will support that some component of the Final Public Hearing must include an in-person meeting within affected communities as determined by NIRB”. Did QIA consider the hearing in Pond Inlet in January and February an in-person meeting with affected communities?

<b>MHTO-QIA-06</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	ISP, Inuit Committee and ICA
<b>Question:</b>	

1. Under section 1.1.2 of Schedule A of the ICA, it describes the Inuit Stewardship Plan (ISP) as “a Project management plan that **will be** authored by QIA”. Has QIA completed drafting the ISP?
2. Under the same section, the “ISP will be presented to Baffinland for feedback prior to QIA’s finalization and approval”. Is QIA required under the ICA to incorporate Baffinland’s feedback, or could QIA ignore the feedback?
3. The QIA has developed draft terms of reference for the Inuit Committee and Inuit Social Oversight Committee under section 1.2.3 of Schedule A. What are next steps in the development and approval of these terms of reference?
4. Under the ICA, Schedule A, section 1.3.1, the QIA is tasked with a number of action items. Please indicate, for each item, whether the task has been completed:

The following specific tasks are required of QIA:

- (a) Develop and initiate a 2020-21 Inuit Stewardship Work Plan, including resource requirements.
- (b) Develop an Inuit Stewardship Plan Framework.
- (c) Develop and finalize a Terms of Reference for the Inuit Committee and Inuit Social Oversight Committee.
- (d) Hiring of QIA staff to support the two ISP streams.
- (e) Communities and QIA appoint members to the Inuit Committee and Inuit Social Oversight Committee and select a Chair and Vice-Chair for each committee.

- (f) QIA and Inuit Committees develop and finalize the Inuit Stewardship Plan.
- (g) Develop the overall structure of, and first annual work plans for, the Culture, Resources and Land Use Monitoring Program (in support of the Inuit Committee) and Community Action Research Team (in support the Inuit Social Oversight Committee), for consideration by their respective committees.
- (h) Work with Baffinland to integrate the Inuit Stewardship Plan with the draft and final Adaptive Management Plan and IIBA implementation as appropriate, include development and integration of appropriate thresholds, trigger and actions for both the CRLU and Social Streams into the Adaptive Management Plan.
- (i) Implement first year of monitoring for each stream with reporting to QIA, Inuit Communities and Baffinland.

5. In respect of item h above, please indicate which “appropriate thresholds, trigger and actions” have been developed for a) the CRLU; and b) the Social Streams, and integrated into the AMP.

<b>MHTO-QIA-07</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	ISP, Inuit Committee and ICA
<b>Question:</b>	

Under Schedule A, section 1.4, QIA and BIM are identified as jointly responsible “for approving the Adaptive Management Plan and adaptive management actions included within other Project-related plans (identified in Section 3)”.

1. If QIA does not approve the AMP and/or adaptive management actions, can it be forced into arbitration by BIM?

The ICA Schedule A, section 2.1.3 states “The parties agree certain adaptive management responses may challenge the overall scope, scale and viability of the Project and therefore a higher degree of certainty that the Project is reasonably associated with the effect is required.”

2. How does this requirement for a “high degree of certainty” that the Project has caused an effect before triggering an adaptive management response reflect IQ?

<b>MHTO-QIA-08</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	ICA - plan development
<b>Question:</b>	

The ICA, Schedule A, section 2.2.5 indicates that the parties agree “Work on the Marine Monitoring Plan and Aquatic Effects Monitoring Plan will be prioritized. Parties further agree to come to joint approval of an initial set of objectives, indicators, thresholds and responses for these plans within 90 days of signing the Inuit Certainty Agreement, unless otherwise agreed. The parties agree to also continue work on the Surface Water Aquatic Ecosystem Management Plan, Waste Management Plan, Borrow Pit and Quarry Management Plan, Snow Management Plan and Road Management Plan with a focused and concerned effort to come to agreement on initial objectives, indicators, thresholds and responses for each plan within 90 days.”

1. Are either of the Marine Monitoring Plan or Aquatic Effects Monitoring Plan complete?
2. Please describe the “initial set of objectives, indicators, thresholds and responses” for these plans are and where these are filed.
3. Are any of the Surface Water Aquatic Ecosystem Management Plan, Waste Management Plan, Borrow Pit and Quarry Management Plan, Snow Management Plan or Road Management Plan complete?
4. Please describe the “initial set of objectives, indicators, thresholds and responses” for these plans are and where these are filed.
5. Under section 2.2.10, QIA is committed to approving additional revisions to the ADM and associated Environmental Management Plans. Please explain why QIA has given approval in advance to revisions that are not known or complete?

<b>MHTO-QIA-09</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Culture Resources and Land Use (CRLU) Assessment
<b>Question:</b>	

1. What is the purpose of the CRLU assessment in the ICA?
2. Does the QIA view the CRLU Assessment as an important tool for the collection of additional IQ related to Phase 2?
3. When does QIA expect results of the CRLU Assessment will be available?
4. Please justify or provide a rationale for completing a CRLU Assessment only after Phase 2 is approved, considering the position outlined in ICA ID 6, section 6.1.1

which indicates that “Baffinland’s Final Environmental Impact Statement (FEIS) underestimated impacts to Culture, Resources and Land Use (CRLU)” and that “QIA and the North Baffin communities have not found Baffinland’s current findings credible.”

5. How will the results of the CRLU assessment, which will come after a possible project approval, be meaningfully incorporated into project operations?
6. Would QIA agree that many Inuit believe that impacts to harvesting have not been adequately considered by BIM’s assessment to date? If so, does QIA expect the CRLU will adequately consider impacts to Inuit harvesting?

<b>MHTO-QIA-10</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	ICA - Adaptive Management
<b>Question:</b>	

Section 2.1.3 of the ICA ID 2 states: “The parties agree certain adaptive management responses may challenge the overall scope, scale and viability of the Project and therefore a higher degree of certainty that the Project is reasonably associated with the effect is required.”

1. What specifically, are the “certain adaptive management responses” to which this clause of the ICA applies?

In addition, ID 2, section 2.1.13 states: “Understanding High Action Level responses may challenge the overall scope, scale and viability of the Project, a higher degree of certainty that the Project is reasonably causing the effect and that the High Action Level response is appropriately designed to reverse the effect is required.”

Section 2.1.11 also indicates that “adaptive management will be applied where an adverse effect has been identified through project monitoring...” and 2.1.12 notes: "The parties agree that reasonable adaptive management responses will be applied appropriately to deal with identified materially adverse effects even when it is not possible to determine with complete certainty the degree to which the Project is contributing to the total effect observed. This Valued Component-centred approach is critical to maintaining the values Inuit have in the Project affected area.”

2. Can QIA clarify which adaptive management responses will be implemented per 2.1.12 and which will be exempted via 2.1.3 and 2.1.13?
3. Which effects does QIA suggest can be measured and identified per 2.1.11 and 2.1.12, especially based on monitoring which may not have the ability to detect project level effects?
4. BIM’s Adaptive Management Plan indicates a Review of Monitoring Program Results will be undertaken against Predetermined Indicators and Thresholds. What

are these indicators and thresholds? What monitoring program results have been, or will be, utilized in this review? When is this review anticipated to occur?

<b>MHTO-QIA-11</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Impacts and community acceptability
<b>Question:</b>	

During the January-February Hearing, QIA requested a commitment from BIM related to a railway monitoring plan, "...given how important this monitoring program is to ensure that we avoid impacts to caribou on North Baffin that are beyond what are community defined levels of acceptability."<sup>11</sup>

Please clarify, what are the community defined levels of acceptability in terms of impacts to caribou?

<b>MHTO-QIA-12</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Future project developments
<b>Question:</b>	

The ICA sets out provisions for requirements should BIM consider mining operations over 30 MT per year. Has QIA been made aware that BIM at some point in the future, envisions a Mary River project that produces and transports more than 30 MT per year?

<b>MHTO-QIA-13</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Overlap with Tallirutiup Imanga National Marine Conservation Area
<b>Question:</b>	

How does QIA reconcile over 400 ship transits and ice breaking shipping within a 4.5 month window, as fitting within the conservation measure contemplated by the Tallirutiup Imanga National Marine Conservation Area?

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<sup>11</sup> S. Leech, Hearing Transcript Doc ID 333448, Vol 4, p 764, lines 13-16.

When is the Management Plan expected to be finalized for the Tallirutiup National Marine Conservation Area, to the best of QIA's knowledge?

<b>MHTO-QIA-14</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Early Warning Indicator for narwhal
<b>Question:</b>	

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

1. Would QIA agree that this is an acceptable EWI? Does QIA agree that this is an adequate and appropriate indicator to demonstrate an early warning for project related effects to narwhal?
2. Does QIA have any idea or prediction in terms of the time that would be required with consistent monitoring to identify changes in this indicator (i.e. 2 years, 4 years, etc)?
3. Is it possible that other factors could contribute to changes in juvenile-calf ratio?
4. How likely is it that changes in this indicator could be linked to project effects from shipping?
5. How much variability in population surveys is expected, and how does that translate into certainty about results of juvenile-calf ratio in the Eclipse Sound stock?
6. Would QIA suggest that the Eclipse Sound stock size is a suitable indicator of population health?
7. What other early warning indicators would QIA suggest be adopted by BIM to monitor for impacts to narwhal?

<b>MHTO-QIA-15</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Tusaqtavut Study
<b>Question:</b>	

Did QIA's Tusaqtavut Study specifically consider harvest per level effort as it relates to caribou, seal, narwhal, or fish?

Did it consider impacts to harvesting from the current Mary River project?

Did the Tusaqtavut Study specifically consider impacts to seal and/or harvesting? Can QIA confirm this, and please provide clear references to where that information is filed?

<b>MHTO-QIA-16</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Wildlife Compensation Fund (WCF)
<b>Question:</b>	

1. How many applications to the WCF has the QIA received each year since 2015 (or its implementation) and how many of those applications submitted have been paid each year?
2. Is the WCF meant to serve as a mitigation?
3. Does the WCF provide for compensation only when the project directly interferes with a harvest, or would it also apply when an indirect impact such as general avoidance, short-term, or localized avoidance may impact on harvesters looking for animals in areas where normally found? If the WCF only addresses direct interference, how are more indirect impacts dealt with?
4. Is it accurate to state that “the number of hunts that would have been interrupted is directly addressed through the wildlife compensation fund”?<sup>12</sup> Does the QIA track any other measures of harvesting and/or impacts on harvesting?
5. Does BIM have a role in the WCF, or is it managed by QIA? If the former, what is that role?
6. Does the WCF program provide information and data to BIM for its consideration?

<b>MHTO-QIA-17</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	IQ collection and working groups
<b>Question:</b>	

1. Does QIA consider MHTO attendance at working group meetings (Marine, Terrestrial, Socio-Economic) an adequate means for BIM’s collection of IQ related to Phase 2 (or the current project)? Please explain why, or why not.
2. Does QIA consider working group meetings an adequate format and undertaking for the collection of IQ? Please explain why or why not.
3. Does QIA agree it may be relevant and important that other HTOs are invited to participate in MEWG and TEWG meetings? Please explain why, or why not.
4. Does QIA maintain IQ and local knowledge and contribute the same to BIM for the Phase 2 project? If so, for which communities, and how have those communities indicated their support for QIA's acting on their behalf in this manner?

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<sup>12</sup> M. Lord-Hoyle, Hearing Transcript, Doc ID 333451, Vol 7, p 1299, lines 24-26.

<b>MHTO-QIA-18</b>	
<b>Directed to:</b>	QIA
<b>Subject:</b>	Environment Working Groups
<b>Question:</b>	

1. Would the QIA suggest the Marine and Terrestrial Environment Working Groups (M/TEWG) are an appropriate mechanism to address mitigation and monitoring related to the approved project?
2. Has the QIA experienced any challenges or issues in working with the M/TEWG, and if so, have they been rectified, either through the working groups themselves, or through the NIRB?
3. Has the QIA made requests of BIM through the M/TEWG that have not been addressed?
4. Does the QIA have any suggestions for revising the current environmental working group approach under the current operations and/or specifically related to a potential Phase 2 approval?

## Questions to Government of Nunavut

<b>MHTO-GN-01</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	Caribou - Monitoring
<b>Question:</b>	

Does the GN agree that BIM should consider expanding its Zone of Influence (ZOI) beyond 14 km, considering the cumulative effect of road **and** rail infrastructure?

Has the GN considered movement zones of influence for caribou at other mining projects in Nunavut or Arctic Canada with roads or linear infrastructure in reviewing BIM's assessment and other experiences which may be relevant? Does the GN agree that BIM's assessment should be informed by similar projects with roads and linear infrastructure with a potential to interact with caribou?

Does the GN agree with BIM that a 14 km ZOI is not only adequate, but is a conservative estimate, especially considering the transportation infrastructure associated with the Phase 2 development includes both road **and** rail?

<b>MHTO-GN-02</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	Caribou - Monitoring
<b>Question:</b>	

1. Is the GN confident in the effectiveness of BIM's proposed mitigation measures for caribou? If not, or if low, please elaborate on what concerns exist.
2. What would increase the GN's confidence level in BIM assessment of impacts?
3. What additional information or research is needed to increase certainty about whether the Phase 2 project could have behavioural impacts on caribou?
4. What additional monitoring programs or increase in effort level does the GN recommend BIM undertake to assess impacts of the current operation on caribou? If any have been suggested, has BIM agreed?
5. Is the GN confident that BIM's current caribou monitoring plans will be able to identify whether caribou are showing that they move away from transportation or other project infrastructure, or that they are impacted by the Phase 2 development? If not, what particular improvements would the GN suggest are necessary to identify deflection or other impacts?

<b>MHTO-GN-03</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	Caribou - Regional monitoring programs
<b>Question:</b>	

1. How frequently does the GN conduct regional aerial surveys? When was the last survey completed, and when is the next aerial surveying for the Baffin Island caribou planned?
2. Can regional surveys that monitor caribou abundance also contribute to an understanding or analysis of project effects? Please explain.
3. How focused are abundance surveys on the project study areas? Are there limitations in using range-wide abundance surveys in their application to project assessment? Please clarify, and explain if these abundance surveys could be modified to reflect portions of the range (as in RSA, LSA) and/or to detect project effects.
4. Does BIM collaborate with the GN on regional caribou monitoring programs? If so, are the details of that collaboration public? Specifically, when is the last time BIM contributed financial resources to the GN's program, outside of in-kind provision of goods or support?

<b>MHTO-GN-04</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	Caribou - Monitoring results
<b>Question:</b>	

1. Does the GN have any data regarding whether and how frequently caribou may have crossed the tote road since operations began in 2015?
2. Has the GN been presented with any evidence from BIM or its own programs which show that the Tote Road has not presented a barrier or deterrent to caribou since BIM began operating and moving hundreds of ore trucks along the Tote Road every day? If so, please provide specific details which demonstrate the road has not served as a barrier or deterrent to caribou movement.
3. Given the current low population numbers, would GN suggest that project impacts to caribou can be reliably determined at this time? If so, please provide details.
4. Does the GN agree with BIM's suggestion that approximately 350 collared caribou would be needed to show behavioural changes from population numbers around 50,000?

<b>MHTO-GN-05</b>	
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<b>Directed to:</b>	GN
<b>Subject:</b>	Caribou - Related experiences
<b>Question:</b>	

Does the GN have any reports on how mining and transportation infrastructure in Nunavut impact caribou behaviour or population levels? If yes, have these been considered or factored into the GN's submissions regarding the Phase 2 assessment?

Are the site conditions and caribou herds in the Kivalliq region and Baffin Island similar enough that the GN can draw from and apply experiences at the Meadowbank and Meliadine mines and roads with regard to impacts to caribou? If so, please explain how the operating mines and road infrastructure have informed the GN's approach to the Phase 2 assessment. If not, please explain why not - that is, please clarify the limitations of applying caribou interactions with other mining road experiences to the Phase 2 assessment.

<b>MHTO-GN-06</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	Caribou - AIP, MOU
<b>Question:</b>	

1. The GN and BIM were working toward an Agreement in Principle (AIP) for presentation prior to the completion of the NIRB's Hearing. Is this available now for parties to review?
2. Does the GN have similar AIPs or research agreements with other mining companies or developers in Nunavut? Are those made public?
3. Will the GN include the MHTO as a party to the agreement with BIM in order that we are able to access results of research as it is conducted? If not, will the GN share the results of the research with the MHTO and others?
4. Will the AIP or any research memorandum of understanding restrict the sharing or release of data collected?
5. Specifically, BIM stated during the January-February Hearing that the AIP is essentially a contribution agreement - BIM would be funding regional caribou monitoring to support government initiatives that will also help inform Baffinland's research programs, but BIM would not have access to that data or the ability to share it.
6. Can the GN confirm that BIM will not have access to the data collected under the AIP or research agreement?
7. Can the GN also confirm that access to the data will not be restricted or withheld in any way?

<b>MHTO-GN-07</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	ICA, outstanding issues
<b>Question:</b>	

Does the ICA resolve issues related to the GN's area(s) of jurisdiction? If so, please clarify and explain which issues are partly, or fully, resolved via ICA commitments or programs. Was the GN involved in the negotiation of the ICA?

<b>MHTO-GN-08</b>	
<b>Directed to:</b>	GN
<b>Subject:</b>	Environment Working Groups
<b>Question:</b>	

1. Would the GN suggest the Marine and Terrestrial Environment Working Groups (M/TEWG) are an appropriate mechanism to address mitigation and monitoring related to the approved project?
2. Has the GN experienced any challenges or issues in working with the M/TEWG, and if so, have they been rectified, either through the working groups themselves, or through the NIRB?
3. Has the GN made requests of BIM through the M/TEWG that have not been addressed?
4. Does the GN have any suggestions for revising the current environmental working group approach under the current operations and/or specifically related to a potential Phase 2 approval?

## Questions to the Government of Canada - CIRNAC

<b>MHTO-CIR-01</b>	
<b>Directed to:</b>	CIRNAC
<b>Subject:</b>	Inclusion of IQ
<b>Question:</b>	

In its December 24, 2020 Updated Final Written Submission to the NIRB, CIRNAC's issue with BIM's TSD 25 not referencing the collection of IQ or TK from workshops held in 2015-16 was outlined, and noted that as a result, it was difficult for CIRNAC to determine whether or not IQ or TK was included in the impact prediction/assessment process.

1. Did CIRNAC's evaluation consider the quality of IQ and TK provided within BIM's materials and assessment, or only require that references to sources be presented?
2. Does CIRNAC agree that the IQ workshops cited by BIM in their responses are adequate to inform the project assessment, considering these were held prior to the introduction of a shortened shipping season and railway project, that is, prior to a major project scope change?
3. Has CIRNAC heard from communities, HTOs, and/or the QIA either during the process leading up to the Hearing, or at the January-February Hearing itself, that adequate IQ has been collected and incorporated in the assessment to date? Please be specific in your response.

<b>MHTO-CIR-02</b>	
<b>Directed to:</b>	CIRNAC and Regulatory Authorities (TC, NRCan, ECCC, DFO)
<b>Subject:</b>	Psychosocial impacts and perceived risk
<b>Question:</b>	

Testimony regarding psychosocial impacts Inuit have felt was provided during the January-February Hearing. Specific concerns regarding the impact of iron ore dust on freshwater resources (snow, ice, and water used for human consumption) while undertaking land-based activities, and impacts of this dust to the food web (i.e. benthic organisms, fish, mammals) were raised.

In addition, during the Community Roundtable in Pond Inlet, residents noted that Inuit may be purposefully avoiding introducing country foods to their children.

BIM has not considered psychosocial impacts of its project to Inuit in terms of perception of risk and the resulting impacts to traditional and land-based cultural practices including, but not limited to: hunting, fishing, camping, country food consumption, skin preparation and traditional sewing. Does Canada take into account the psychosocial impacts of BIM's project on Inuit, specifically the items enumerated here, in considering how BIM's project will affect Inuit?

The impacts of the Phase 2 project proposal on marine mammals, caribou, fish, and access to freshwater resources are an important aspect of the assessment of this project and its impacts on the constitutionally protected rights of Inuit. How are these impacts considered by the Government of Canada? Please be specific in your response.

## Questions to the Government of Canada - DFO

<b>MHTO-DFO-01</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Project Effects
<b>Question:</b>	

BIM's Overview Presentation during the January-February Hearing stated "Mary River is an established project where the effects are well understood compared to a new operation."

Findings of IQ indicate a low confidence in the Proponent's assessment of predicted impacts within the FEIS Addendum, and the MHTO, other community organizations and even government departments have emphasized that BIM's findings are unreliable and not well supported.

Does DFO agree that the effects of shipping and ice breaking on narwhal are well understood based on existing operations? Does DFO agree that the effects of shipping and ice breaking on narwhal are well understood in the context of a new operation?

Does DFO agree that the effects (direct and indirect) of shipping and ice breaking on seal are well understood, or well understood compared to a new operation?

Does DFO consider impacts to Inuit harvest of marine mammals, and if so, does it consider these impacts to be well understood?

<b>MHTO-DFO-02</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Narwhal body condition
<b>Question:</b>	

During the January-February Hearing, BIM indicated that body condition and project effects are not directly linked and therefore it was not using body condition as an indicator for its monitoring programs. BIM did acknowledge that this is "an important indicator for the animal as a whole so we can understand what's happening to narwhal, but we view this as a regional initiative led by the responsible resource manager, in this case Fisheries and Oceans, largely

because skinnier narwhal are likely a source of prey reductions, which is under the mandate of Fisheries and Ocean.”<sup>13</sup>

Does DFO agree that body condition is not an appropriate indicator to be used to determine project related impacts?

Does DFO agree that skinnier narwhal (decreased blubber thickness) is more likely related to prey reductions than to project related impacts? If so, what level of certainty does DFO have that this is the case, and what further research or investigation would be required to determine if project shipping and stress were having an effect on fitness and/or blubber thickness?

Does DFO agree that monitoring body condition in narwhal could be a relevant measure of indirect project impacts? Please provide rationale.

Does DFO agree that no direct line of impact can be drawn between heightened cortisol levels in narwhal blubber and project shipping related impacts?

Would DFO consider cortisol levels to be an appropriate indicator for stress from project related impacts?

What indicators would DFO consider relevant or important to consider in determining project related impacts to narwhal?

<b>MHTO-DFO-03</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Narwhal - Ice breaking and predation
<b>Question:</b>	

During the January-February Hearing, BIM made the following statement:

*“Baffinland is committed to not enter the ice prior to initial fracturing of the sea ice. Therefore, there's no overall appreciation or -- of speedup or acceleration of sea ice breakout. As a result, we are confident that there will not be an opportunity for orcas or killer whales to come into the regional study area at an earlier time than normal, and, therefore, we expect no difference on the overall impact of predation in the regional study area on narwhal relative to shipping.”<sup>14</sup>*

Does DFO agree that no acceleration of sea ice break up will occur as a result of project shipping and early season ice breaking?

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<sup>13</sup> P. Rouget, Hearing Transcript Doc ID 333449, Vol 5, p. 1010, lines 9-15.

<sup>14</sup> P. Rouget, Hearing Transcript Doc ID 333450, Vol 6, p. 1051-52, lines 21-26 and 1-4.

Does DFO agree with BIM's above rationale that there will be no opportunity for killer whales to enter the RSA earlier than normal, and, that there will be no difference on impact of predation on narwhal relative to shipping?

<b>MHTO-DFO-04</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Incorporation and integration of experience from production increase operations
<b>Question:</b>	

Would DFO agree that the impacts of the Production Increase activities have been broadly examined during the Phase 2 consideration, and that experiences, knowledge and data gained over the course of these 4 production years have been adequately integrated by BIM into the Phase 2 assessment process? Please explain and provide specific examples.

Further, in his May 19, 2020 decision to the NIRB approving the Production Increase Proposal, Minister Vandal indicated that the "Responsible Ministers agreed to revise T&C 183 to include the following: "The Proponent shall every six months provide to the DFO a tracking table of (i) collective recommendation [sic] of the other members of the working group and (ii) any directions from DFO. For each, the table must show the Proponent's means of implementation. Where any direction or recommendations are not fully implemented, the Proponent shall include the rationale."<sup>15</sup>

Has DFO received an update from BIM to this regard, and if so, has it been filed with the NIRB? Has DFO provided directions to BIM as contemplated, and if so, where are those directions filed?

<b>MHTO-DFO-05</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Impacts to narwhal
<b>Question:</b>	

During the January-February Hearing, BIM indicated it had a “predominantly western science-based program running, and they're telling us one story about narwhal and wildlife. They're telling us that -- that abundance in the population is -- is stable from

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<sup>15</sup> Hon. D. Vandal (GoC) to K. Kaluraq (NIRB). May 19, 2020.

before the project and during the project. They're telling us that narwhal will react to -- to the ships when they see them. They'll swim away, but they'll come back."<sup>16</sup>

Does DFO agree that BIM's monitoring program(s) have adequately and with certainty shown that narwhal abundance and the population is stable compared to pre-project shipping and now, during project operations? Please explain.

<b>MHTO-DFO-06</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Ringed seal monitoring
<b>Question:</b>	

If DFO is responsible for conducting seal abundance surveys, when was last seal abundance done in the RSA? Do these surveys also indicate distribution of seal in this area?

How frequently are these surveys conducted? Could these surveys indicate if decreases in the population or changes in their distribution were occurring? If so, what time period would be required, and what type of analysis would be needed to make such a determination?

Does DFO agree that stock management and determining effects on seal of the project operations in the RSA is the job of DFO?

<b>MHTO-DFO-07</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Ringed seal - Assessment
<b>Question:</b>	

Considering the importance of ringed seal to the diet and harvesting practices of Mittitmatalingmiut, does DFO consider ship strikes on seals to be the primary potential impact of icebreaking and shoulder season shipping ongoing currently, and as proposed for Phase 2?

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<sup>16</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333453, p. 1605, lines 11-17.

Does DFO also consider it necessary to assess indirect impacts of shipping in shoulder seasons on seals? If not, please explain why that is, specifically reconciling that with the community's reliance on seal for sustenance harvesting and associated cultural practices and stated IQ which indicates indirect impacts of fall shipping will have an impact on seal fidelity to the area later in the winter season.

Does DFO agree that not shipping in sensitive life periods for seals (breeding, pupping, nursing) is sufficient rationale for BIM's determination that its project will have no significant impact to seal from shipping?

Does DFO agree that shipping in the fall shoulder season may have effects on seal's fidelity to the RSA during winter months, that is, seal may select other habitat to develop breathing holes and dens? Please provide supporting evidence.

<b>MHTO-DFO-08</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Narwhal - Eclipse Sound stock, impacts
<b>Question:</b>	

Does DFO agree that the Eclipse Sound Stock population numbers are stable?

Does DFO agree that monitoring population level impacts may not be a sensitive enough measure to take into account changes that are important to Inuit or according to IQ?

Would DFO agree that by the time population level impacts are seen, Inuit harvesting may have already been significantly impacted?

<b>MHTO-DFO-09</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Narwhal - Early warning indicator
<b>Question:</b>	

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

1. Has DFO agreed that this is an acceptable EWI? Does DFO agree that this is an adequate and appropriate indicator to demonstrate an early warning for project related effects to narwhal?
2. Does PC agree that this indicator has been implemented?
3. Does DFO have any idea or prediction in terms of the time that would be required with consistent monitoring to identify changes in this indicator (i.e. 2 years, 4 years, etc)
4. Is it possible that other factors could contribute to changes in juvenile-calf ratio?
5. How likely is it that changes in this indicator could be linked to project effects from shipping?
6. How much variability in population surveys is expected, and how does that translate into certainty about results of juvenile-calf ratio in the Eclipse Sound stock?
7. What other early warning indicators would DFO suggest be adopted by BIM to monitor for impacts to narwhal? Has DFO directed BIM to incorporate any additional indicators?

<b>MHTO-DFO-10</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Narwhal - Eclipse Sound stock
<b>Question:</b>	

1. Are the most recent population estimates for Eclipse Sound stock from 2013 surveying?
2. How frequently does DFO conduct population abundance estimates via these surveys?
3. How much has DFO's estimate of this stock decreased from the 2000s to the most recent numbers available?
4. How often does DFO make recommendations to change the Total Allowable Harvest for narwhal?
5. Why has DFO not updated the Total Allowable Harvest for the Eclipse Sound stock, given updated population numbers?

<b>MHTO-DFO-11</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Outstanding issues re ice-breaking, adaptive management
<b>Question:</b>	

In DFO's Updated Written Submission dated January 15, 2021 and filed with NIRB, DFO sets out its unresolved concerns with BIM's proposed increase in shoulder season

shipping and icebreaking activities. Those concerns appear at pages 26-29. Specifically, DFO recommends that BIM should avoid: shipping during the shoulder seasons; and ice-breaking activities. Further, DFO disagrees with Baffinland's conclusions that overall the impacts will not be significant.

Does DFO continue to make this recommendation that BIM avoid shipping during the shoulder seasons, and avoid ice-breaking activities? Why does DFO make this recommendation and what are DFO's concerns? Please provide detailed responses.

In making its finding, DFO says that "Baffinland has not provided information, references, data and/or analyses to support the "Not Significant" rating." Does DFO continue to hold this view? If not, what information, references, data and/or analyses has BIM provided to DFO since January 15, 2021 to support the "Not Significant" rating, and how have these changed DFO's view?

In its "Detailed Review" (page 28), DFO notes that "Baffinland has indicated that adaptive management strategies will be implemented in the event that project effects exceed predictions. DFO is of the opinion that adaptive management strategies should be identified in advance of potential impacts." Has BIM provided DFO with the indicated adaptive management strategies since January 15, 2021?

<b>MHTO-DFO-12</b>	
<b>Directed to:</b>	DFO
<b>Subject:</b>	Shipping - Mitigation and monitoring
<b>Question:</b>	

In its February 24, 2020 correspondence to the NIRB regarding the Production Increase extension proposal<sup>17</sup>, DFO indicated that engaging in no icebreaking activities was the most conservative mitigation measure to protect marine mammals, unless Baffinland provided an updated assessment and list of mitigations for DFO's review and approval.

1. Has BIM provided an updated assessment and list of mitigations that satisfy DFO?
2. Does DFO maintain the position, given the current state of information and assessment provided by BIM, that no icebreaking is the most conservative mitigation measure to protect marine mammals?
3. DFO used the term 'icebreaking' as a general reference to transits that require the use of an icebreaking vessel, noting that it was "working with all parties ensure a common understanding of the meaning."
4. Has DFO developed a definition or further defined a common understanding of "icebreaking" in terms of the Mary River project?

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<sup>17</sup> T. Hoggarth (DFO) to T. Arko (NIRB), February 24, 2020.

5. Does DFO remain committed to the definition of icebreaking as meaning transits that require the use of an icebreaking vessel?
6. Does DFO agree that specific and possibly restrictive mitigation measures such as transit restrictions, use of convoys, and reduced speeds should be employed when an icebreaking vessel is required for project related ship movements?

In the February 24, 2020 correspondence, DFO also recommended that Baffinland provide 'A summary of monitoring conducted during the opening and closing of the shipping season' with 'Consideration for marine mammal behaviours or additional ecological factors in their determination of shipping season opening and closing, such as ...outmigration of narwhal, and a commitment to reporting annually on the determination of the opening and closing of the shipping season.'

7. Has BIM provided this summary of monitoring conducted during opening and closing of the shipping season?
8. Has BIM provided any information demonstrating its consideration for marine mammal behaviours or additional ecological factors in determining shipping opening and closing? If not, has DFO provided direction to BIM that it do so, per Condition 183? If materials have been provided to DFO, has it shared these with the NIRB or otherwise made those details public?

Furthermore, the February 24, 2020 correspondence also indicated that "DFO will be continuing to work with Baffinland to develop biological indicators to open and close the shipping season. These indicators will find a balance between protection of marine mammals and the marine environment, as well as the need for shipping."

9. What is the status of the development of biological indicators to open and close shipping seasons?
10. Has DFO considered the importance of sea ice to Inuit for harvesting and travel in developing biological indicators with BIM? Specifically, does DFO agree with IQ which states that fall shoulder season ice breaking may deter seals from selecting habitat in areas of the RSA traditionally relied upon by Inuit as a prime harvesting area? Has this been considered in the development of biological indicators?
11. If not completed, what is DFO's plan to move forward with BIM and develop biological indicators for this ice breaking?
12. Does DFO agree that it is imperative these be developed urgently, given that BIM has been operating ice breaking shipping for 3.5 years without having undergone assessment, or having mitigation measures reviewed and considered by the NIRB, DFO, or any other agencies through a formal process such as this?
13. Will DFO commit to include the MHTO in discussions around the development of these indicators, and to consider IQ in their selection?

<b>MHTO-DFO-13</b>	
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<b>Directed to:</b>	DFO
<b>Subject:</b>	Environment Working Groups
<b>Question:</b>	

1. Would the Department suggest the Marine Environment Working Group (MEWG) is an appropriate mechanism to address mitigation and monitoring related to the approved project?
2. Has the Department experienced any challenges or issues in working with the MEWG, and if so, have they been rectified, either through the working groups themselves, or through the NIRB?
3. Has the Department made requests of BIM through the MEWG that have not been addressed?
4. Does the Department have any suggestions for revising the current environmental working group approach under the current operations and/or specifically related to a potential Phase 2 approval?

# Questions to the Government of Canada - Health Canada

<b>MHTO-HC-01</b>	
<b>Directed to:</b>	Health Canada
<b>Subject:</b>	Mercury levels safe for consumption
<b>Question:</b>	

What is considered a safe level of mercury exposure in food for human consumption?

<b>MHTO-HC-02</b>	
<b>Directed to:</b>	Health Canada
<b>Subject:</b>	Freshwater consumption
<b>Question:</b>	

Does Health Canada agree that BIM has adequately demonstrated that freshwater resources required by Inuit to sustain harvesting activities do not pose a risk to human health if consumed? Note this relates to snow, ice, and open water, and that the spatial extent of Inuit travel and harvesting far exceeds BIM's LSA and RSA.

What further monitoring or analysis would Health Canada recommend to determine whether freshwater resources required by Inuit are impacted by widespread dust dispersion from project sites and transportation infrastructure?

## Questions to the Government of Canada - PC

<b>MHTO-PC-01</b>	
<b>Directed to:</b>	Parks Canada
<b>Subject:</b>	Narwhal - Early warning indicator
<b>Question:</b>	

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

Has PC agreed that this is an acceptable EWI? Does PC agree that this is an adequate and appropriate indicator to demonstrate an early warning for project related effects to narwhal?

Does PC agree that this indicator has been implemented?

What other early warning indicators would PC suggest be adopted by BIM to monitor for impacts narwhal?

<b>MHTO-PC-02</b>	
<b>Directed to:</b>	Parks Canada
<b>Subject:</b>	Overlap with Tallirutiup Imanga National Marine Conservation Area
<b>Question:</b>	

1. How does PC reconcile over 400 ship transits and ice breaking shipping within a 4.5 month window, as fitting within the conservation measures contemplated by the Tallirutiup Imanga National Marine Conservation Area?
2. When is the Management Plan expected to be finalized for the Tallirutiup National Marine Conservation Area?
3. Has PC considered the spill risk assessment submitted by WWF Canada which found a 33% chance of major oil spill during the life of the Phase 2 project?<sup>18</sup> Does PC accept the conclusions of WWF Canada? Has PC done

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<sup>18</sup> Baffinland Bulk Carrier Spill Scenario - Costs and Consequences. Filed by WWF Canada, January 18, 2021.

its own spill risk assessment? Has PC considered what mitigations or considerations are necessary given the potential for an oil spill?

4. Does PC agree that specific and possibly restrictive mitigation measures such as transit restrictions, use of convoys, and reduced speeds should be employed whenever an icebreaking vessel is required for project related ship movements?

<b>MHTO-PC-03</b>	
<b>Directed to:</b>	PC
<b>Subject:</b>	Environment Working Groups
<b>Question:</b>	

1. Would the Department suggest the Marine Environment Working Group (MEWG) is an appropriate mechanism to address mitigation and monitoring related to the approved project?
2. Has the Department experienced any challenges or issues in working with the MEWG, and if so, have they been rectified, either through the working groups themselves, or through the NIRB?
3. Has the Department made requests of BIM through the EWG that have not been addressed?
4. Does the Department have any suggestions for revising the current environmental working group approach under the current operations and/or specifically related to a potential Phase 2 approval?

## Questions to the Government of Canada - TC

<b>MHTO-TC-01</b>	
<b>Directed to:</b>	Transport Canada
<b>Subject:</b>	Oil spill risk assessment
<b>Question:</b>	

1. Has Transport Canada considered the spill risk assessment submitted by WWF Canada which found a 33% chance of major oil spill during the life of the Phase 2 project?<sup>19</sup>
2. Does TC consider the mitigation measures in place currently as being adequate to address a high spill potential? What further measures or considerations does TC recommend are necessary given this potential for an oil spill?
3. Does TC agree with the scenario analysis estimate presented in WWF's report, namely that the total costs associated with a worst-case spill from an ore carrier servicing the Mary River Mine could range from \$303 million to \$16.9 billion CAD? Please explain any areas of disagreement.
4. Has TC run its own analysis of potential spills and costs? If so, what is the potential for a major spill, and what are the cost values associated with such an incident?

The report states that "The Canadian marine liability regime establishes \$35.2 million as the liability limit for a vessel of the same gross tonnage as the ore carrier modeled in this document. Costs incurred above the ship owner's liability limit would be externally borne by government and taxpayers."

5. Does TC agree with the statement regarding the Canadian marine liability regime and the limit for vessels such as ore carriers modelled being \$35.2 million?
6. Does TC agree that costs incurred over that limit would be borne by the Canadian government and taxpayers?

<b>MHTO-TC-02</b>	
<b>Directed to:</b>	Transport Canada

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<sup>19</sup> *ibid.*

<b>Subject:</b>	Definition of icebreaking
<b>Question:</b>	

Has TC reached an agreed-upon definition for icebreaking with Baffinland in the context of the Mary River project?

Would TC agree that icebreaking generally means ship transits that require the use of an icebreaking vessel?

Would TC agree that specific and possibly restrictive mitigation measures such as transit restrictions, use of convoys, and reduced speeds should be employed when an icebreaking vessel is required for project related ship movements?

BIM has provided no photographs, videos, or other visual aids to assist with comprehending shoulder season shipping and ice breaking. Is TC in a position to present general video and audio presentations to the MHTO and the public during the Hearing to help further understanding around shoulder season shipping in the various ice conditions as contemplated by this project proposal?

## Questions to Oceans North

<b>MHTO-ON-01</b>	
<b>Directed to:</b>	Oceans North
<b>Subject:</b>	Project Effects
<b>Question:</b>	

BIM's Overview Presentation during the January-February Hearing stated "Mary River is an established project where the effects are well understood compared to a new operation."

Findings of IQ indicate a low confidence in the Proponent's assessment of predicted impacts within the FEIS Addendum, and the MHTO, other community organizations and even government departments have emphasized that BIM's findings are unreliable and not well supported.

Does Oceans North agree that the effects of shipping and ice breaking on narwhal are well understood, or well understood compared to a new operation?

Does Oceans North agree that the effects (direct and indirect) of shipping and ice breaking on seal are well understood, or well understood compared to a new operation?

<b>MHTO-ON-02</b>	
<b>Directed to:</b>	Oceans North
<b>Subject:</b>	Impacts to narwhal
<b>Question:</b>	

During the January-February Hearing, BIM indicated it had a "predominantly western science-based program running, and they're telling us one story about narwhal and wildlife. They're telling us that -- that abundance in the population is -- is stable from before the project and during the project. They're telling us that narwhal will react to -- to the ships when they see them. They'll swim away, but they'll come back."<sup>20</sup>

Does Oceans North agree that BIM's monitoring program(s) have adequately and with certainty shown that narwhal abundance and the population is stable compared to pre-project shipping and now, during project operations? Please explain.

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<sup>20</sup> M. Lord-Hoyle, Hearing Transcript Doc ID 333453, p. 1605, lines 11-17.

Does Oceans North also agree that BIM's program(s) adequately and with certainty demonstrate that narwhal will react to ships when they see them by swimming away, but that they will come back? Please explain.

<b>MHTO-ON-03</b>	
<b>Directed to:</b>	Oceans North
<b>Subject:</b>	Narwhal body condition
<b>Question:</b>	

During the January-February Hearing, BIM indicated that body condition and project effects are not directly linked and therefore it was not using body condition as an indicator for its monitoring programs. BIM did acknowledge that this is “an important indicator for the animal as a whole so we can understand what's happening to narwhal, but we view this as a regional initiative led by the responsible resource manager, in this case Fisheries and Oceans, largely because skinnier narwhal are likely a source of prey reductions, which is under the mandate of Fisheries and Ocean.”<sup>21</sup>

1. Does Oceans North agree that body condition is not an appropriate indicator to be used to determine project related impacts?
2. Does Oceans North agree that skinnier narwhal (decreased blubber thickness) is more likely related to prey reductions than to project related impacts? If so, what level of certainty does Oceans North have that this is the case, and what further research or investigation would be required to determine if project shipping and stress were having an effect on fitness and/or blubber thickness?
3. Does Oceans North see any value to monitoring body condition in narwhal as a relevant measure of indirect project impacts? Please provide rationale.
4. Can a direct line of impact can be drawn between heightened cortisol levels in narwhal blubber and project shipping related impacts? Please explain.
5. Would Oceans North consider cortisol levels to be an appropriate indicator for stress from project related impacts?

<b>MHTO-ON-05</b>	
<b>Directed to:</b>	Oceans North
<b>Subject:</b>	Narwhal - Early warning indicator
<b>Question:</b>	

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<sup>21</sup> P. Rouget, Hearing Transcript Doc ID 333449, Vol 5, p. 1010, lines 9-15.

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

1. Has Oceans North agreed that this is an acceptable EWI? Does Oceans North agree that this is an adequate and appropriate indicator to demonstrate an early warning for project related effects to narwhal?
2. Does Oceans North agree with BIM that this indicator has been implemented?
3. Does Oceans North have any idea or prediction in terms of the time that would be required with consistent monitoring to identify changes in this indicator (i.e. 2 years, 4 years, etc)?
4. Is it possible that other factors could contribute to changes in juvenile-calf ratio? If so, what are those factors?
5. How likely is it that changes in this indicator could be linked to project effects from shipping?
6. How much variability in population surveys is expected, and how does that translate into certainty about results of juvenile-calf ratio in the Eclipse Sound stock?
7. What other early warning indicators would Oceans North suggest be adopted by BIM to monitor for impacts to narwhal?

<b>MHTO-ON-06</b>	
<b>Directed to:</b>	Oceans North
<b>Subject:</b>	Environment Working Groups
<b>Question:</b>	

1. Would Oceans North suggest the Marine Environment Working Group (MEWG) has been an appropriate mechanism to address mitigation and monitoring related to the approved project?
2. What challenges or issues has Oceans North experienced in working with the MEWG, and have they been rectified, either through the working group itself, or through the NIRB?
3. Has Oceans North made requests of BIM through the MEWG that have not been addressed?
4. Does Oceans North have any suggestions for revising the current environmental working group approach under the current operations and/or specifically related to a potential Phase 2 approval?

## Questions to WWF Canada

<b>MHTO-WWF-01</b>	
<b>Directed to:</b>	WWF Canada
<b>Subject:</b>	Narwhal - Early warning indicator
<b>Question:</b>	

BIM indicated during the January-February Hearing that one EWI for narwhal - immature narwhal ratio - had been adopted and implemented for the operating project to date.

Has WWF Canada agreed that this is an acceptable EWI? Does WWF Canada agree that this is an adequate and appropriate indicator to demonstrate an early warning for project related effects to narwhal?

Does WWF Canada agree with BIM that this indicator has been implemented?

What other early warning indicators would WWF Canada suggest be adopted by BIM to monitor for impacts to narwhal?

<b>MHTO-WWF-02</b>	
<b>Directed to:</b>	WWF Canada
<b>Subject:</b>	Spill probability
<b>Question:</b>	

Has BIM responded to the WWF Canada submission "Baffinland Bulk Carrier Spill Scenario – Costs and Consequences" filed January 18, 2021?

Has BIM conducted its own study about a fuel oil spill, or engaged any experts to address this possibility? How do those results compare to this assessment?

<b>MHTO-WWF-03</b>	
<b>Directed to:</b>	WWF Canada
<b>Subject:</b>	Environment Working Groups
<b>Question:</b>	

1. Would WWF Canada suggest the Marine and Terrestrial Environment Working Groups (M/TEWG) are an appropriate mechanism to address mitigation and monitoring related to the approved project?
2. What challenges or issues has WWF Canada experienced in working with the M/TEWG, and have they been rectified, either through the working groups themselves, or through the NIRB?
3. Has WWF Canada made requests of BIM through the M/TEWG that have not been addressed?
4. Does WWF Canada have any suggestions for revising the current environmental working group approach under the current operations and/or specifically related to a potential Phase 2 approval?