

NUNAVUT IMPACT REVIEW BOARD
BAFFINLAND IRON MINES CORPORATION MARY RIVER PHASE 2 PROPOSAL
NIRB File No. 08MN053

**FINAL WRITTEN SUBMISSIONS OF
MITTIMATALIK HUNTERS AND TRAPPERS ORGANIZATION**

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I. EXECUTIVE SUMMARY

Introduction

1. Mittimatalik Hunter and Trappers Organization (“MHTO”) members have travelled and harvested on the lands and waters surrounding Pond Inlet since time immemorial. MHTO members are reliant on harvesting marine mammals, such as narwhal and seal, terrestrial mammals, such as caribou, and fish, such as Arctic char, for their food, their economy, their clothing and their culture.
2. MHTO members harvesting rights¹ are set out in the *Nunavut Land Claims Agreement* (the “Nunavut Agreement”) and recognized and affirmed in s. 35 of the *Constitution Act, 1982*.²
3. MHTO members’ harvesting area is at the epicentre of the Mary River Phase 2 Development Proposal (the “Project”). The Project would directly and significantly adversely impact the lands, waters, and wildlife upon which MHTO members depend to practice their rights, including through a substantial increase in shipping and use of ice-breakers through MHTO members’ main marine harvesting area and important marine wildlife habitat, a new railway that would bisect the terrestrial harvesting area and caribou habitat, a new ore-dock and increased activity at Milne Port, and increased production with increased dust contamination.
4. At stake in this hearing is not only the ecosystemic integrity of the Project area, but the survival of the way of life of Mittimatalingmiut and specifically, Inuit of Pond Inlet. MHTO members have reported that key species for harvesting have declined or moved out of the area since the operations of the existing Mary River project began. Baffinland Iron Mines Corporation (“Baffinland”) has not adequately acknowledged or addressed these impacts as reported by Inuit, integrated them into the assessment of impacts for the expanded operations for the Project, or shown that they can be prevented, mitigated, and managed.
5. The culture of the Inuit of Pond Inlet is put at risk by the Project. Knowledge is passed down from generation to generation while out on the land. If wildlife depended on for the practice of treaty rights declines or moves out of the area, members will not be able to successfully harvest in traditional areas and pass down knowledge to the next generation. These effects on MHTO members’ culture would be irreversible.
6. It is not sufficient to tell MHTO members to go elsewhere if they can no longer harvest in the areas that they have traditionally done so. The evidence in the hearing demonstrates that Baffinland has underestimated the impacts of the Project on harvesting rights. Critical gaps in Baffinland’s assessment have been acknowledged and identified, including with respect to the, lack of extensive, up-to-date, and detailed Inuit Qaujimajatuqangit (“IQ”) gathered, lack of Inuit involvement in the assessment, and lack of consideration of cumulative impacts, but those

¹ The terms harvesting rights and treaty rights are used interchangeably throughout these written submissions and refer to the rights set out in the Nunavut Agreement and protected by s. 35 of the *Constitution Act, 1982*.

² *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (as amended)*, May 25, 2018, s. 2.2.1; *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982 (UK), 1982*, c 11.

gaps have not been addressed. A meaningful and thorough assessment of impacts of the Project on Inuit rights, culture, land and resources, in combination with other past, present and reasonably foreseeable future cumulative effects causing agents, remains outstanding, along with measures to address those impacts.

7. Baffinland's Project is too large, and it is being pursued too quickly, without the required information to understand the extent of the impacts to harvesting rights and to address those impacts. Baffinland has failed to comply with existing project conditions, including for monitoring, depriving the Nunavut Impact Review Board (the "Board" or "NIRB") of key baseline information to understand the impacts of the expanded Project operations. Further, Baffinland has not reconciled its prediction of impacts in the Final Environmental Impact Statement ("FEIS") with the current situation experienced by Inuit of significant impacts to harvesting rights and way of life, and it has not taken steps to mitigate with any success, including with respect to the decline of narwhal in Eclipse Sound.

8. Further, despite a requirement in the existing project certificate that Baffinland develop early warning indicators ("EWIs"), thresholds, and responses, the adaptive management plan remains at a nascent stage of development and cannot be relied upon to mitigate impacts to harvesting rights if they exceed predictions for the Project. The work under the Inuit Certainty Agreement ("ICA") is also incomplete or has not begun. The ICA at this stage is nothing more than an agreement to make (or arbitrate) a plan – the plan itself remains to be developed.

9. A Project that violates the constitutionally protected treaty rights of Inuit cannot be in the regional or national interest, protect the existing and future well-being of the residents and communities of the Nunavut Settlement Area, or align with the priorities and values of the residents of the Nunavut Settlement Area.³

10. In the result, Baffinland has not discharged its burden to show that the predicted significant adverse ecosystemic and socio-economic impacts of the Project would be prevented, mitigated, or managed if conducted under the existing Terms and Conditions of Project Certificate No. 005, or proposed revisions to Project Certificate No. 005, in line with the objectives of the Nunavut Agreement and the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 ("NuPPAA"). Further, the duty to consult and accommodate, which is a constitutional imperative, remains outstanding. As such, the Board should recommend against the Project proceeding at this time.

Failure of Baffinland to Incorporate Inuit Qaujimajatuqangit

11. Baffinland was required to collect and integrate IQ into the FEIS, but has failed to do so. In addition to not sufficiently collecting IQ, Baffinland has not reconciled differences between Inuit observations of the impacts from the existing project (including to narwhal, caribou and seal) and Baffinland's conclusions on the significance of the impacts of the expanded Project. Instead, Baffinland has requested corroborating data before considering IQ, completely disregarding the oral tradition of the Inuit and the experience acquired over thousands of years of direct human contact with the local environment.

³ Nunavut Agreement, ss. 12.2.2, 12.2.5, 12.5.5; NuPAA, ss. 103(1)(b), 103(1)(c).

12. MHTO members have already observed significant adverse impacts from the existing project. Yet, Baffinland has ignored the IQ in order to conclude that the Project will not have significant adverse impacts on key species and harvesting rights. As a result, Baffinland has underestimated the effects of the Project on harvesting rights and not shown that it can prevent, mitigate or manage the significant adverse impacts of the Project.

Failure to Assess Impacts to Inuit Harvesting Rights

13. A gap in the assessment that transcends all of Baffinland's application material is the failure to adequately and accurately assess impacts to Inuit harvesting rights. This is a fatal error that prevents the Board from determining that the Project reflects the priorities and values of the residents of the designated area and is in the regional or national interest. It further prevents the Crown from relying on the Board's process to discharge the duty to consult and accommodate.

14. The information put to the Board by MHTO and other Inuit groups is that the current project has had significant adverse impacts on treaty rights. Baffinland has not sufficiently monitored these impacts or incorporated these impacts into the significance determinations for the Project. Instead, Baffinland relies on outdated predictions with respect to effects in its assessment that are not based on monitoring and do not incorporate IQ.

15. Through the Tusaqtavut Study, the Qikiqtani Inuit Association ("QIA") has gathered some baseline information on treaty rights, establishing a range of impact pathways from the Project to marine hunting, terrestrial hunting and trapping, fishing and fresh water, travel and trails, and cultural continuity values. However, the study recommends a full "[a]ssessment 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."⁴ This still remains outstanding for the Project. The gaps in Baffinland's assessment have been acknowledged, but Baffinland has not integrated the information in the study in an update to its impact assessment, including its predictions on significance and mitigations.

16. Thus, Baffinland has failed to put an adequate assessment of impacts to harvesting rights and plan to mitigate those impacts before the Board. The only up-to-date evidence that the Board has before it with respect to the impacts of existing project operations (that are proposed to be significantly expanded) to harvesting rights is that of Inuit saying those impacts are already significant and have not been mitigated or managed. From what is known about existing operations, the Project will have significant adverse impacts on Inuit harvesting rights and unduly prejudice the ecosystemic integrity of the area.

17. Much more work is needed to understand the extent of the impacts of the Project to treaty rights, combined with those cumulative effects of any other project that has been carried out, is being carried out or is likely to be carried out, and whether they can be mitigated and managed, and by what measures. The way of life and culture of Inuit in Pond Inlet is at stake. Without understanding the extent to which current operations are impacting Inuit, and whether those

⁴ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, p. 5 (Filing ID 325448).

impacts can be mitigated in order to protect the way of life and culture of Inuit, Phase 2 is premature and should not be recommended for approval at this time.

Impacts of Increased Marine Shipping and Icebreaking

18. The marine environment and the sea ice are vital to the ability of Inuit to harvest. The Project will vastly expand marine shipping from 122 to 392 transits and involve extensive shipping during shoulder seasons.

19. Despite the scale of the Project, the nature and extent of the impacts of marine shipping and icebreaking operations to marine mammals relied upon for the practice of treaty rights still remains poorly understood. Baffinland has not provided information, data and/or analyses to support its conclusion of “not significant” effects, or integrated its most recent monitoring data that shows the decline in narwhal abundance in Eclipse Sound into its effects predictions.

20. While the proposed plan does not explicitly include icebreaking, icebreaking is clearly a contemplated activity that is intended (and has been done for the existing project) in years where the freezing cycle overlaps with the shipping season. Comprehensive – or even basic – monitoring has not been undertaken to understand the risks. If this Project is recommended for approval, contrary to the submissions of MHTO with respect to the significant information gaps and risks, it should be on the basis that shipping only be allowed during the open water season when no icebreaker is required, not during a set of prescribed months regardless of ice conditions.

Impacts of the Project on Narwhal and Narwhal Harvesting

21. The importance of narwhal to MHTO members cannot be overstated. Despite being aware that narwhal are essential to MHTO members’ way of life and survival, Baffinland has not undertaken the monitoring or research necessary to understand how marine shipping and icebreaking has and will impact narwhal.

22. There remains a number of gaps and inconsistencies in the material provided by Baffinland. Baffinland has downplayed the critical importance of the local study area to narwhals, including for mating, calving, nursing, and foraging. Inuit know this to be true, and in recent years have, regrettably, reported fewer narwhal and calving events, and a decline in the body condition of narwhal.

23. Baffinland has not addressed, or integrated into its effects assessment, the fact that since the increase in marine shipping, Inuit are experiencing significant adverse impacts on their harvesting rights. Instead, Baffinland continues to rely on its thresholds that are not narwhal specific and are not supported by the monitoring data, underestimating the impacts of marine shipping and icebreaking on narwhal.

24. Baffinland has also not adequately considered the cumulative impacts of the vast expansion of marine shipping on narwhal and their use of Eclipse Sound. The Board remains without essential, up-to-date information about the impacts of multiple, repeated vessel passages on narwhal in combination with cumulative regional disturbance in the impact assessment.

25. Baffinland's recent monitoring reports for the Project confirm what Inuit have been saying for a number of years – that there has been a significant decline in narwhal abundance in Eclipse Sound and that narwhal are sensitive to acoustic disturbance. Further, a recent study, co-authored by DFO and local Inuit, shows that cortisol – a stress response hormone and stress indicator in marine mammals – has significantly increased in narwhal since the increase in marine shipping.

26. Baffinland was required pursuant to the existing project certificate to develop robust EWIs, thresholds, monitoring protocols, and responses in consultation with the Marine Environment Working Group ("MEWG"). Baffinland has failed to do so. Baffinland's proposed EWI and monitoring protocols are insufficient and will not capture the full extent of Project effects, while proposed mitigation measures remain unproven.

27. With the current level of marine shipping and icebreaking having significant impacts, Baffinland has not shown that it can mitigate existing impacts – never mind the impacts of vastly expanded operations from 122 to 392 vessel transits. Narwhal moving out of the area where they have traditionally been hunted is devastating for Inuit and the ecosystemic integrity of the region. At this stage, Baffinland has not shown that it would be able to prevent, mitigate and manage the impacts to narwhal and narwhal harvesting for the Board to support a recommendation of Project approval.

Impacts of the Project on Seal and Seal Harvesting

28. MHTO members have relied on the harvest of seal in valuable seal habitat in the Project area for generations. Seal are depended on to survive and are a key part of the diet of Inuit.

29. As with narwhal, Inuit are experiencing significant adverse impacts on seal harvesting at the current shipping levels, including declines in abundance and health, but Baffinland has not integrated this knowledge into its effects predictions or mitigation measures. Baffinland acknowledges that it has not prioritized follow-up monitoring for ringed seal in the last years that it has undertaken marine shipping and shoulder season icebreaking to verify whether its effects predictions for the original project were accurate. Baffinland has further not adequately assessed and addressed the potential for icebreaking to disrupt the life stages of seal.

30. Baffinland is relying on the same unproven assumptions for the original project, without doing the work to verify its predictions are accurate. The failure to monitor and consider these existing impacts completely undermines the reliability of Baffinland's impact assessment. On the information before the Board, Baffinland has not shown that it could prevent, mitigate and manage the impacts to seal and seal harvesting from the expanded Project.

Impacts of the Project on Caribou and Caribou Harvesting

31. Caribou are critically important to the Inuit way of life, and the Project area has long been and continues to be a place where caribou are harvested. The hilly and mountainous landscapes around Mary River and the mine site are known caribou calving grounds, and are relied upon for critical life stages. It is recognized that caribou cross through the valley where the Tote Road is located, and where the railway is to be located. Hunting caribou in this area

has been passed down through the generations. The continuity of these practices is of the utmost importance to the community.

32. Baffin Island caribou are at a critical state where extirpation is possible for some or all of Baffin Island. Despite the fundamental importance of caribou and the vulnerability of caribou to anthropogenic disturbance, Baffinland has not accurately characterized the cumulative impacts of the extensive additional linear disturbance (road and 110 km northern railway – combined with the approved 190 km of southern railway) proposed in caribou habitat, or monitored at sufficient scales to capture the avoidance of existing project infrastructure by caribou.

33. Baffinland fails to account for the fact that caribou are at a tipping point and that additional disturbance at this time could impact the ability of the population to recover. Instead, Baffinland largely relies on what they term the current lack of interaction of caribou with the existing project infrastructure to excuse the lack of a rigorous assessment of the potential effects of the Project on caribou. Due to caribou's recognized behaviour of moving away from anthropogenic disturbance, significant numbers of caribou may never interact with the Project. This does not mean that there is no effect.

34. Baffinland has not adequately considered the impacts to harvesting rights if caribou avoid the area or change their movement patterns due to the Project. Inuit are reporting that they are no longer successful at finding caribou in the areas where they have traditionally been hunted, and that the existing project has disrupted movement patterns in caribou herds and increased hunter effort. Baffinland admits that it did not assess cumulative impacts on caribou harvest (including harvest quotas) and has not integrated these impacts into its effects assessment.

35. Given the information available on caribou responses to anthropogenic disturbance, and the observations of the existing impacts to caribou by Inuit, Baffinland has not provided sufficient support for its conclusion that the Project – in combination with existing impacts – will not have a significant adverse impact on caribou and caribou harvesting, and that it is able to prevent, mitigate, and manage impacts to caribou. These impacts are likely to be significant and potentially fatal to the Baffin Island caribou herd.

36. Further, adaptive management requires that monitoring will capture effects and that there are adaptations that can be made to protect caribou. Baffinland's proposed EWIs and monitoring protocols remain undeveloped and will not capture Project effects. Baffinland has also not shown what mitigation measures would be available after the railway is built, and whether they would be effective for caribou. Baffinland does not have any tools in its "Mitigation Toolkit" to address impacts if caribou do not cross the railway or make use of the crossings.

Impacts to Freshwater, Fish and Fish Harvesting

37. Fishing contributes significantly to food security for community members of Pond Inlet, and occurs in the Project area year-round, particularly for Arctic char in the areas of Lake Qurluqtuuq and Tuugat Lake.

38. Baffinland does not deal with the impacts of dust from the project and how that has resulted in contamination, or a perception of contamination, that has interrupted the harvesting of fish in key areas by Inuit. Baffinland has not monitored Qurluqtuq Lake for dust, sediments, and fish health, and incorporated that monitoring data into its impact assessment for the Project. Baffinland further has not collected any IQ to support their general statement that landlocked Arctic char are only fished “incidentally”.

39. As such, the impacts to freshwater and fish harvesting have not been adequately assessed and addressed for the Project. This is information that the Board needs to determine whether the Project is in the regional interest and that MHTO needs to understand the impacts to harvesting rights.

Impacts of Dust on Harvesting

40. The dust from the existing project has transformed the landscape on which Inuit practice their harvesting rights. Inuit rely on the snow for drinking while out on the land – the perception that the snow is contaminated by the dust from the project operations has already impacted harvesting rights, which are proposed to be significantly expanded for the Project.

41. Even if dust on snow does not exceed health standards (which has yet to be confirmed for the areas in which Inuit practice their rights), Baffinland fails to grapple with the fact that Inuit will avoid using snow covered by dust as a water source. The inability to drink from the land while harvesting seriously and significantly interrupts the ability of Inuit to be out on the land for long periods of time with consequent impacts to harvesting rights. Further, there is concern about the impacts of dust on the marine and aquatic environments, including on sea ice, and the contamination of country foods. Baffinland has not adequately recognized, monitored or incorporated these impacts into its impact assessment for the Project.

42. While Baffinland has recently committed to additional monitoring and study of the impacts of dust, this commitment comes far too late and does not assist the Board to understand the potential impacts of the Project. Baffinland has not shown that it can sufficiently prevent, mitigate or manage the impacts of dust on its proposed terms and conditions.

Failure to Consult on and Assess Alternatives for the Northern Railway

43. Baffinland proposes to construct a 110 km northern railway – this is in addition to the southern railway that has already been approved for the existing project. Despite the potential for the northern railway to bisect the harvesting area and caribou habitat, Baffinland has not adequately justified the need for the additional railway, and assessed the options for carrying out the Project that are technically and economically feasible and the anticipated ecosystemic and socio-economic impacts of such options. Baffinland has further not accurately captured the cumulative effects of the combined linear disturbance of a road and northern railway (along with the already approved southern railway).

44. Baffinland asserts that the southern railway and Steensby Port is not economically viable in the short term, but does not provide the Board with detailed financial information to allow the Board to weigh the increased capital costs against increased ecosystemic and socio-

economic costs to the environment and treaty rights that will result from approving an additional northern railway.

45. Baffinland has further failed to consult adequately with affected communities about the northern railway and routing options for the Project. Baffinland has not integrated concerns about caribou and the permanent bisecting of harvesting areas into its analysis. Inuit raising concerns about dust does not translate to a preference for a railway that bisects valued harvesting areas. As a result, Baffinland has not provided the Board with the evidence necessary to consider the options for the Project and to justify the addition of a northern railway.

Mitigation Measures have not been Developed

46. Baffinland has not provided the necessary information to understand the extent of the likely significant adverse impacts of the Project and developed mitigation measures to address those impacts. Many information gaps remain, creating an unacceptable level of uncertainty.

47. Baffinland has not undertaken comprehensive monitoring of the existing project impacts (in combination with other cumulative disturbance) and integrated that baseline data into its impact predictions, and plan for prevention, mitigation and management. This missing information adds considerable uncertainty to Baffinland's impact predictions, and ability of Baffinland to prevent, mitigate and manage the impacts of the expanded Project.

48. Baffinland plans to deal with the level of uncertainty in its impact assessment through adaptive management. However, despite it being a requirement of the existing project certificate, Baffinland has not provided complete monitoring plans and adaptive management plans that set out the EWIs, thresholds, and responses, and only plans to develop these plans after Project approval. The work to incorporate Inuit objectives, EWIs, thresholds, and responses remains zero percent complete.

49. Even for the thresholds that have been developed by Baffinland, it is unclear how and when a response will actually be triggered. Baffinland wants a high level of certainty with respect to the linkages to the Project before a response will be triggered. This level of certainty is inappropriate, particularly as Baffinland has not collected baseline data and developed programs to monitor all the factors necessary to assess change and draw a link with the Project.

50. One of the major issues with the functionality of the current working groups is the lack of timely and transparent responses from Baffinland with respect to observed impacts. MHTO is critically concerned that when impacts are observed Baffinland will still say there is not sufficient data to link them to the Project – without having undertaken the effort to collect that data.

51. If Baffinland is going to rely on adaptive management, it must be known in advance of a recommendation on the Project that there are effective measures that can be put into place to mitigate impacts, and the process by which those measures will be triggered. Baffinland has failed to put that information before the Board. The proposed adaptive management plan in its current form will not provide the necessary safeguards if the Project is approved to protect harvesting rights and the ecosystemic integrity of the region.

The Inuit (Un)Certainty Agreement does not Provide Certainty that Effective Mitigation Measures will be Developed

52. The majority of the work agreed to between the parties under the ICA is incomplete or has not even begun. The ICA at this stage is nothing more than an agreement to make a plan – the plan itself remains to be developed and will be subject to arbitration if the parties cannot agree.

53. The ICA defers the gathering of essential information with respect to the impacts of the Project on treaty rights and does not address MHTO's outstanding concerns about whether the impacts of the Project can be adequately monitored, prevented, mitigated, and managed. While it may be appropriate to collect certain information after approval, information that goes to the core of the recommendation that the Board is tasked with making cannot be deferred.

54. Adaptive management decision-making under the ICA also remains unclear – with Inuit and Baffinland having differing perspectives on the decision-making structure. Much uncertainty remains in relation to how Inuit perspectives will be incorporated, how decisions will be made with respect to adaptive management, what criteria those decisions will be based upon (indicators, thresholds, monitoring), and who will be making those decisions.

55. Before the Board makes a recommendation on the Project, Baffinland should be required to undertake the assessments, develop the plans and determine the decision-making structures promised in the ICA, in order to provide a basis for the Board to assess the impacts to treaty rights and to understand adaptive management decision-making for the Project.

Procedural Fairness Missed the Mark

56. The content of the duty of fairness owed by the Board to MHTO is significant. MHTO was entitled to a meaningful opportunity to present their cases fully and fairly, including the right to effectively challenge evidence that contradicted that case. Further, the Nunavut Agreement requires that the Board give due regard and weight to the tradition of Inuit oral communication and decision-making. Due to numerous late filings by Baffinland, MHTO was denied the opportunity to respond to the case of Baffinland and to present its case orally to the Board in line with Inuit oral traditions.

The Duty to Consult and Accommodate Remains Outstanding

57. MHTO members are owed a duty of consultation and accommodation at the deepest end of the spectrum with respect to the impacts of the Project on their harvesting rights.

58. Canada has indicated that it is relying on the Board's process to the extent possible to discharge the duty consult, which may be permissible to some extent, but is subject to the Crown's overriding duty to consider the adequacy of the process in any particular situation. The Board's hearing has not been conducive to the interactive engagement required to discharge the duty to consult. Even as an information gathering tool, the process has been hampered by the lack of information on the specific and cumulative impacts to harvesting rights gathered by

Baffinland and how those impacts will be accommodated as required by the duty. The Crown is required to meaningfully consult with MHTO members about the outstanding issues with respect to the impacts of the Project on harvesting rights that remain unassessed and unaddressed, and to take steps to accommodate those impacts. The Crown has failed to do so.

59. A commitment to monitor impacts after approval, and adaptively manage impacts, cannot displace the need to understand the nature and extent of the treaty rights to be impacted, assess impacts to treaty rights, and put into place mitigations and accommodation as required by the duty in advance of Project approval. As a constitutional imperative, the duty to consult must be discharged prior to any recommendation that the Project proceed.

Conclusion

60. MHTO respectfully submits that the Board should:

- i. ensure that meaningful consultation occurs before the Board issues the recommendation for the Project or recommend against approving the Project due to inadequate consultation;
- ii. find that the Project will have significant adverse ecosystemic and socio-economic impacts, which Baffinland has not shown can be prevented, mitigated, or managed; and
- iii. recommend against the Project proceeding.

III. SUBMISSIONS

A. MITTIMATALIK HUNTERS AND TRAPPERS ORGANIZATION

61. MHTO applied for intervenor status in this hearing due to the direct impacts of the Project on MHTO's members' harvesting rights.⁵ The current Baffinland operations have had a significant impact on the ability of MHTO members to use the land and marine environment for harvesting, and transmit their culture to future generations, and the substantial expansion of this project per the Phase 2 Project proposal would significantly erode MHTO members' rights and undermine their ability to continue to practice those rights in a meaningful way.

62. Pursuant to section 5.7.1 of the Nunavut Agreement, MHTO oversees the exercise of harvesting by its members. MHTO is responsible for, among other things, the regulation of harvesting practices and techniques among members, the allocation and enforcement of community basic needs levels and adjusted basic needs levels among members, and the management of harvesting among members.⁶

⁵ 2019-09-04 Application Form Requesting Intervenor Status (Filing ID 326730).

⁶ Nunavut Agreement, ss. 5.7.1-5.7.3; 2021-01-18 MHTO Intervention: Public Hearing for Mary River Phase 2 Proposal, p. 5 (Filing ID 332616).

63. These submissions are supplemental to MHTO's submissions previously filed in this hearing.⁷

B. THE PROJECT

64. The Project represents a proposal for significant new facilities and activities that were not considered in the original Mary River project or the Early Revenue Phase proposal in an area that is critical to the practice of MHTO members' harvesting rights.

65. The Project proposal involves the following additional facilities and activities:

Milne Port:

- Expansion of the Milne Port Project Development Area (245 ha to 415 ha);
- Construction and operation of a second ore dock capable of berthing capesize ore carriers;
- Modifications/expansion of ore stockpiling;
- New ore crushing/screening facilities and ore handling systems;
- Construction and operation of railway maintenance facilities;
- Expansion of the Port Site accommodation complex, potable water treatment plant and associated sewage treatment plant;
- Expansion of the existing power plant;
- Expansion and re-purposing of laydown areas and ancillary facilities;
- Construction and operation of a landfill site; and
- Increased shipping activities through Milne Port.

Mine Site:

- Increase in total mine production to 30 million tonnes per annum (Mtpa), with an upper limit of 14.4 Mtpa transported via the North Railway to Milne Port (4.2 Mtpa current approved rate under the Early Revenue Phase), and 18 Mtpa transported via the South Railway to Steensby Port (18 Mtpa already approved);⁸
- Removal of secondary crushing;
- Construction and operation of a North Railway Terminal;
- Expansion of permanent fuel storage; and
- Expansion of the mine maintenance facilities and support administration

⁷ 2021-01-18 MHTO Supplemental Final Written Submissions to NIRB for Baffinland's Phase 2 Proposal (Filing ID 332619); 2019-09-23 MHTO Final Written Submission to NIRB for Baffinland's Phase 2 Proposal (Filing ID 326941).

⁸ 2021-05-06 Baffinland 2020 Annual Report to NIRB, PDF p.18 (Filing ID 335134); 2020-08-07 NIRB Updated and Clarified Scope of Assessment (Filing ID 331020); 2021-03-23 Government of Canada Responses to Written Questions Part 1, p.11 (Filing ID 334158).

buildings/facilities (warehouses, shops, etc.)

Mary River Transportation Corridor (Tote Road and North Railway):

- Construction of the 110 km railway with raised bed and track;
- Operation to consist of 2 to 3 trains completing an average of 5 to 8 round trips per day and a maximum of 10 round trips per day;
- Construction/erection of signaling equipment and communication tower as required;
- Construction of multiple water crossings;
- Construction and use of multiple laydown areas, shelters, and small equipment shops at each laydown;
- Construction and operation of four temporary camp pads and mobile camps;
- Eight realignments of the Tote Road to facilitate railway crossings, plus new or modified culverts;
- Additional quarry along the railway corridor;
- Ongoing inspection and maintenance of the railway embankment, railway, signaling and communication equipment, wayside condition monitoring equipment; and
- Transportation of iron ore by rail to Milne Port.

Shipping:

- Expanded shipping season based on ice conditions and Inuit use of the floe-edge, shipping will not occur any earlier than July 1 or later than October 31;
- Addition of larger capsized ore carriers into fleet of vessels calling on Milne Port; and
- Increased shipping frequency during the shipping season (up to 168 ore carrier round trips per year).⁹

66. Further, the Project description as submitted by Baffinland expressly contemplates future expansion, which would potentially increase or prolong ore transport. Under the heading “Potential for Future Development”, Baffinland notes that:

As well, regional exploration has enabled Baffinland to identify additional iron ore deposits that appear, based on surface sampling, to be of similar high-grade iron ore as Deposit No.1. Deposits No. 2 and No. 3 are located adjacent to Deposit No. 1 and have been investigated (drilled) more extensively than the other deposits. Given their close proximity to the current mine site, it is expected that these deposits will be developed either prior to or following exhaustion of ore in Deposit No. 1, utilizing much of the same

⁹ 2020-01-21 Memo Appendix C: Project Description, pp. 1-2 (Filing ID 328818); 2020-10-30 Nunavut Impact Review Board Pre-Hearing Conference Decision Report for Baffinland Iron Mines Corporation’s Phase 2 Development Proposal, pp. 22-25 (Filing ID 331868); See Commitment List ID #241 in 2021-10-26 BIM Letter to NIRB Re Phase 2 Disposition Table and Commitment List, PDF p. 90 (Filing ID 337148).

Project infrastructure. Having the mine and associated shipping, road, and railway infrastructure in place will facilitate such future development in the region.¹⁰

67. Thus, while the Board is considering the proposal as a reconsideration of the original certificate, the proposal involves significant new facilities and activities, and opens up an area that is critical to the practice of MHTO members' treaty rights for future development.

C. MITTIMATALIK HUNTERS AND TRAPPERS ORGANIZATION RIGHTS

68. MHTO members are dependent on the wildlife and integrity of the ecosystems in and around Pond Inlet to practice harvesting rights and sustain themselves.

69. Key species of importance to Inuit include: seal, narwhal, Arctic char and caribou. These species are critical to maintaining Inuit sense of belonging and purpose in the world. They are essential to the Inuit way of life – there are no substitutes.

70. The Nunavut Agreement is a modern treaty that enshrines, protects and recognizes under section 35 of the *Constitution Act, 1982*, Inuit wildlife harvesting rights and rights to participate in decision-making concerning wildlife harvesting.¹¹

71. The preamble to the Nunavut Agreement provides that the parties have negotiated the Agreement based on and reflecting the following objectives:

- (a) to provide for certainty and clarity of rights to ownership and use of lands and resources, and of rights for Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources, including the offshore; and
- (b) to provide Inuit with wildlife harvesting rights and rights to participate in decision-making concerning wildlife harvesting.¹²

72. Inuit have the right to harvest for economic, social and cultural needs and are granted the right to access lands, waters and marine areas within the Nunavut Settlement Area for the purpose of harvesting, subject to the limitations set out in the agreement.¹³

73. Specifically, Article 5 recognizes and reflects, amongst other things, that “the legal rights of Inuit to harvest wildlife flow from their traditional and current use” and seeks to achieve the creation of a system of harvesting rights, priorities and privileges that “reflects the traditional and current levels, patterns and character of Inuit harvesting” and “confers on Inuit rights to harvest wildlife sufficient to meet their basic needs.”¹⁴

¹⁰ 2020-01-21 Memo Appendix C: Project Description, pp. 2-3 (Filing ID 328818).

¹¹ *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982 (UK)*, 1982, c 11; Nunavut Agreement, s. 2.2.1.

¹² Nunavut Agreement, ss. 2.1.1.

¹³ Nunavut Agreement, ss. 5.6.1, 5.7.16, 5.7.30, 5.7.42, 16.1.1, 20.2.4.

¹⁴ Nunavut Agreement, ss. 5.1.2-5.1.3.

74. Article 5 further creates a wildlife management system that “fully acknowledges and reflects the primary role of Inuit in wildlife harvesting”.¹⁵

D. THE PROJECT IS IN AN AREA THAT IS CRITICAL TO THE PRACTICE OF MITTIMATALIK HUNTERS AND TRAPPERS ORGANIZATION RIGHTS

75. The Project is proposed in an area that is critical to the practice of MHTO members’ harvesting rights and to the wildlife on which MHTO members depend.¹⁶

76. The proposed Project is located in an area that has been used by Inuit for generations and that is highly valued. The area contains numerous important sites that support harvesting of country foods, including marine mammals (including ringed seal and narwhal), terrestrial mammals (including caribou), and fish (including Arctic char), and Inuit cultural continuity. These include, but are not limited to:

- (a) Important wildlife habitat for supporting hunting and trapping activities, including important calving areas for both narwhal and caribou in the marine and terrestrial environments respectively;
- (b) High value fish habitat;
- (c) Important water sources, such as springs, rivers, and lakes;
- (d) Important travel routes that are relied upon to access hunting grounds and other communities; and

¹⁵ Nunavut Agreement, ss. 5.1.3(b).

¹⁶ 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 1:Introduction), (Filing ID 333024); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.1:Terrestrial Impacts), (Filing ID 333025); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.2:Terrestrial Impacts-Dust), (Filing ID 333026); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.1:Marine Impacts – Dust Pollution), (Filing ID 333027); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.2:Marine Impacts – Dust Pollution), (Filing ID 333028); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.3: Marine Impacts - Shipping Disturbance on Seal), (Filing ID 333029); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.4: Marine Impacts – Shipping Impact on the Fall and Spring Habitat of the Seal), (Filing ID 333030); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.5: Marine Impacts – Shipping Disturbance on Narwhals), (Filing ID 333031); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 4: Conclusion), (Filing ID 333032); NuPPAA, ss. 90 (b),(c), 103(2).

- (e) Areas relied on for the continuity of Inuit culture, including harvesting, such as teaching areas, campsites and gathering places.¹⁷

77. The Project has the potential to impact, among other things: marine hunting, terrestrial hunting, fishing, fresh water, travel, and cultural continuity. Harvesting practices will be impacted due to, among other things, impacts to the availability and condition of mammals and fish (caribou, narwhal, seal, and Arctic char in particular), restrictions and alterations on access to travel corridors and camps, and interruption of hunting, and the success of harvesting, by Project activities.¹⁸

E. OVERVIEW OF MITTIMATALIK HUNTERS AND TRAPPERS ORGANIZATION PARTICIPATION IN THE HEARING

78. To the extent able, with the resources and funding available, MHTO has engaged in the hearings for the Project in order to obtain the information necessary to understand the impacts of the Project on harvesting rights.

79. MHTO participated in the original 2019 hearing including by presenting at the hearing and providing written submissions.¹⁹ MHTO has also participated in both of the resumed 2021 hearings (April and November) including by filing evidence, asking questions of Baffinland and other intervenors, presenting at the hearing and filing written submissions.²⁰

¹⁷ 2019-06-14 Qikiqtani Inuit Association's Tusaqtavut for Phase 2 Application of the Mary River Project, p. 3 (Filing ID 325450); NIRB Public Hearing Transcripts for January 30, 2021, Vol. 6, pp. 1098:13 - 1098:19 // 1098:24 - 1099:5 // 1099:11 - 1099:20 (Filing ID 333450); NIRB Public Hearing Transcripts for January 30, 2021, Vol. 6, pp. 1114:21 - 1114:26 (Filing ID 333450); NIRB Public Hearing Transcripts for February 1, 2021, Vol. 7, pp. 1312:25 - 1313:2 (Filing ID 333451); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1909:8 - 1910:2 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1913:7 - 1913:9 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1927:1 - 1927:4 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1930:11 - 1930:26 (Filing ID); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1939:1-1939:3 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1947:21-1947:24 (Filing ID 333443).

¹⁸ NIRB Public Hearing Transcripts for January 30, 2021, Vol. 6, pp. 1109:5 - 1109:7 (Filing ID 333450); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1930:11 - 1930:26 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1941:19 - 1942:1 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:12 - 1944:18 (Filing ID 333443); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2243:13 - 2243:18 (Filing ID 333444).

¹⁹ 2019-09-23 MHTO Final Written Submission to NIRB for Baffinland's Phase 2 Proposal (Filing ID 326941); 2019-10-23 MHTO Submission to NIRB's Public Hearing for Mary River Phase 2 [Presentation] (Filing ID 327306).

²⁰ 2021-02-04 MHTO Intervention: Public Hearing for Mary River Phase 2 Proposal [Presentation] (Filing ID 333006); 2021-03-01 MHTO Written Questions: Extended NIRB Hearing for BIM Phase 2 Proposal (Filing ID 333703); 2021-01-18 MHTO Supplemental Final Written Submissions to NIRB for Baffinland's Phase 2 Proposal, p. 15 (Filing ID 332619); See for example, 2021-03-22 MHTO Responses to Questions in Support of NIRB's Assessment of BIM Phase 2 Proposal (Filing ID 334150); 2021-02-04 Trace Metals and Persistent Organic Pollutants Concentration in Narwhals from the Eclipse Sound- Preliminary Report (Filing ID 332993); 2021-02-04 Developing Local Research Capacity for the Monitoring of Marine Resources near Pond Inlet, Nunavut (Filing ID 332992); 2021-02-04 Northern Contaminants Program 2018-2019 Synopsis of Research Report (Filing ID 332991); 2021-02-04 Northern Contaminants Program 2017-2018 Synopsis of Research Report (Filing ID 332990); 2021-02-04 Cortisol Levels in Narwhal (*Monodon monoceros*) Blubber from 2000-2019 (Filing ID 332989).

80. MHTO has sought information, including with respect to the extent of the anticipated impacts to harvesting rights, the gaps in Baffinland's assessment, the level of uncertainty with respect to impact predictions, and measures that will be taken to mitigate and manage impacts. Despite MHTO's engagement, it has not been able to obtain the information necessary to understand the extent of the impacts of the Project on harvesting rights. Many gaps remain in Baffinland's assessment and the information provided.

F. FAILURE OF BAFFINLAND TO COMPLY WITH EXISTING PROJECT CONDITIONS

81. As the Board is considering the substantial expansion of Baffinland's operations, including the addition of significant new infrastructure in areas relied upon for the practice of harvesting rights, MHTO is concerned that Baffinland has not complied with existing project conditions and requirements, despite the project operating for the last seven years.²¹

82. In the 2019-2020 Annual Monitoring Report, the Board highlighted several areas where Baffinland has not achieved "full compliance with areas of concern", including:

- Consistent and effective comparison of ongoing monitoring data to baseline data and the predicted impacts outlined in the FEIS and subsequent addendums (i.e., ERP, Production Increase Proposal and the Extension Request to the Production Increase Proposal);
- Challenges to incorporation of feedback from interested parties through the two (2) processes Baffinland has for comment, the annual report comment processes administered by the NIRB and the Working Groups administered through the Project Certificate;
- Demonstration of integration of Inuit Qaujimajatuqangit into ongoing monitoring program design and implementation; and
- Timely implementation of proposed mitigations measures leading to delays in publication of results and subsequent adaptation to programs.²²

83. These deficiencies relate to core areas of concern with respect to impacts to harvesting rights. Baffinland has not captured existing impacts to harvesting rights at all, nor have they considered or integrated IQ in their monitoring.

84. The Board held as follows:

The NIRB agrees with QIA, GN, CIRNAC, ECCC, PC, WWF, and ON that the main text of the 2019 Annual Report contains inconsistencies (Table 1) in monitoring programs and limited incorporation of advice brought forward by the Marine and Terrestrial Working Group members. The NIRB also agrees that the current format of the report is not clear regarding the effectiveness

²¹ "Baffinland should have thought -- or a thoroughly effects monitoring plan based on findings of monitoring done to date. This is not in place. Missing indicators, thresholds, and triggers for effects on narwhals does not meet existing Project Certificate Conditions 110 and 112." NIRB Public Hearing Transcripts for April 13, 2021, Vol. 14, pp. 2731:15 - 2731: 20 (Filing ID 335047) Eric Ootoovak, MHTO; Nunavut Agreement, ss. 12.7.2-12.7.3

²² 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, pp. 30-31 (Filing ID 332232).

of vegetation, dust, caribou, and marine mammal monitoring programs.²³

85. In the 2020-2021 Annual Monitoring Report, the Board reiterated that “full compliance has not yet been achieved” by Baffinland with the existing project certificate.²⁴ The key areas of concern that still need to be addressed include but are not limited to:

- Consistent and effective comparisons both in writing and visualization (e.g., figures, graphs, etc.) of ongoing monitoring data to baseline data and the predicted impacts outlined in the FEIS and subsequent addendums;
- Discussion between Baffinland and interested parties and/or working groups regarding how review and feedback should be incorporated into draft monitoring reports and the annual report in order to ensure that the NIRB and all parties have fulsome data in a timely manner;
- Integration of Inuit Qaujimajatuqangit into monitoring program designs and implementation remains a concern to several parties and communities and Baffinland should continue to explore way to better communicate and articulate their efforts;
- Timely implementation of proposed mitigations measures leading to delays in publication of results and subsequent adaptation to programs; and
- The main text of the 2020 Annual Report contains inconsistencies, limited incorporation of advice and/or comments brought forward by both the Marine and Terrestrial Working Group members.²⁵

86. Critically, the Board highlighted that the failure of Baffinland to adequately monitor and report on impacts makes it difficult for the Board to determine whether or not impacts are in line with predictions as follows:

When reviewing the report, the Board and parties are often comparing the presented information with what was previously discussed or promised at previous Hearings, technical meetings, annual reports, and decision reports or ongoing processes. Without these summaries and complete comparisons to a full data set and results, it is difficult for the Board and other reviewers to ascertain whether or not impacts are being observed as a result of the Mary River Project, in addition to determining whether observed impacts or reported data are in line with the predictions provided within the FEIS and/or amendments and applicable permit and license requirements. This is required to determine trends at the Project, whether existing monitoring programs are

²³ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, pp. 31, 59, 63, 65, 66, 68, 69, 71, 72, 76, 77, 78, 79, 81, 85, 86, 87, 89, 96, 97, 98, 99, 104, 113, 117, 118, 124 (Filing ID 332232).

²⁴ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 31 (Filing ID 337185).

²⁵ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 31 (Filing ID 337185).

effective, and if additional monitoring or mitigation needs to propose.²⁶

87. As set out below, MHTO is concerned that Baffinland has not done the work to understand the impacts of the existing project and as a result much uncertainty remains with respect to the extent of the predicted impacts of the expanded Project. This is a critical gap.

88. To respond to this uncertainty, Baffinland proposes to monitor impacts and adaptively manage impacts. However, Baffinland has still not developed monitoring plans and adaptive management plans in consultation with affected communities, with appropriate indicators, thresholds and responses for their current operations. This is despite this being a requirement of the existing project certificate.

89. Baffinland has not accurately monitored, reported and responded to the existing impacts of the project. The Board reminded Baffinland in the latest Annual Report that “it is responsible for monitoring the Project based on the current Project Certificate and should be focused on meeting Terms and Conditions through what tools and avenues that are available currently”. Baffinland’s failures in this regard further undermines MHTO’s trust that Baffinland can manage an expanded operation.

90. Prior to a recommendation on the Project, Baffinland should be required to provide updated monitoring results for existing impacts that incorporate IQ, and develop monitoring plans and adaptive management plans with affected communities for the expanded Project. This information is critical to the Board’s understanding of whether or not the expanded Project impacts can be prevented, mitigated, or managed.

91. As set out below, MHTO members are reporting significant impacts from the existing project that exceed predictions that have not been addressed by Baffinland. Yet, Baffinland relies on the same unsupported assumptions in its impact predictions for the expanded Project that have not been verified by diligent monitoring of the existing project. The trust in Baffinland’s ability and willingness to detect and address impacts in a timely way has been lost.

92. The integrity of the regulatory process is at stake – despite the Board repeatedly emphasizing areas of concern – Baffinland has not complied with the regulatory requirements set by the Board resulting in critical information gaps for the review of the Phase 2 Project proposal. With certificate compliance not being achieved since project operations began seven years ago, and given the level of existing impacts reported by Inuit, the approach of deferring the gathering of this critical information until after approval is no longer supportable.

G. JURISDICTION OF THE BOARD

93. The Nunavut Planning Commission (“NPC”) determined that the Project proposal requires screening by the NIRB under section 12.4.3 of the Nunavut Agreement as amended

²⁶ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 32 (Filing ID 337185).

“because it is for a component or activity that was not part of the original or previously amended proposal and its inclusion is a significant modification of the project.”²⁷

94. In respect of the Project, the Board in turn has determined that:

- Baffinland’s Phase 2 Development Proposal constitutes both a significant modification to the original project and a significant modification to the original scope of the Phase 2 Development Proposal received in 2014;
- Baffinland’s Phase 2 Development Proposal is integrally-linked to the Original Mary River Project (as amended to reflect the Early Revenue Phase Proposal); and
- If the Board determines that the proposed modifications are acceptable, amendments to the existing terms and conditions of the Mary River NIRB Project Certificate No. 005 may be necessary to reflect the potential for ecosystemic and socio-economic impacts resulting from the proposed modifications.²⁸

95. Given its view of the “integral link” between the original Mary River project and the Project proposal, the Board determined to conduct the assessment of potential impacts as a reconsideration of the existing terms and conditions of the project Certificate No. 005 under Article 12, section 12.8.2 of the Nunavut Agreement and section 112 of NuPPAA.²⁹

96. In doing so, the Board referenced the Board’s view that:

As illustrated in several reconsiderations of Project Certificate terms and conditions conducted by the NIRB to date under Article 12, Section 12.8.2 of the Nunavut Agreement, the Board’s reconsideration must necessarily include an assessment of the potential for the proposed modification to result in changes to the ecosystemic and socioeconomic effects previously assessed for the original project, and the assessment required by the NIRB during a reconsideration is no less rigorous than a screening (and in some cases, even a full environmental review).³⁰

97. Under Article 12, s. 12.2.2, of the Nunavut Agreement the “primary functions” of the Board are as follows:

- (a) to screen project proposals in order to determine whether or not a review is required;
- (b) to gauge and define the extent of the regional impacts of a project, such definition to be taken into account by the Minister in making his or her determination as to the regional interest;
- (c) to review the ecosystemic and socio-economic impacts of project proposals;
- (d) to determine, on the basis of its review, whether project proposals should proceed, and if so, under what terms and conditions, and then report its determination to the Minister; in addition,

²⁷ 2018-05-29 Nunavut Planning Commission Conformity Determination, p. 3 (Filing ID 318134).

²⁸ 2018-06-11 Re: NPC File No 148420 [Mary River Phase 2 Expansion Project], p.5 (Filing ID 318152).

²⁹ 2018-06-11 Re: NPC File No 148420 [Mary River Phase 2 Expansion Project], p.6 (Filing ID 318152).

³⁰ 2018-06-11 Re: NPC File No 148420 [Mary River Phase 2 Expansion Project], p.7 (Filing ID 318152).

NIRB's determination with respect to socio-economic impacts unrelated to ecosystemic impacts shall be treated as recommendations to the Minister; and

(e) to monitor projects in accordance with the provisions of Part 7.

98. Article 12, s. 12.2.5 provides that:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of residents of Canada outside the Nunavut Settlement Area.³¹

99. Consistent with other reconsiderations, the Board is tasked with assessing (i) whether the Project proposal should proceed and, if so, (ii) recommending any revisions to the terms and conditions of Project Certificate No. 005 consistent with the objectives of the Nunavut Agreement and NuPPAA.³²

100. Guidance on the factors to be taken into account in reviewing any project proposal are set out in Article 12, s. 12.5.5 of the Nunavut Agreement as follows:

NIRB shall, when reviewing any project proposal, take into account all matters that are relevant to its mandate, including the following:

- (a) whether the project would enhance and protect the existing and future well-being of the residents and communities of the Nunavut Settlement Area, taking into account the interests of other Canadians;
- (b) whether the project would unduly prejudice the ecosystemic integrity of the Nunavut Settlement Area;
- (c) whether the proposal reflects the priorities and values of the residents of the Nunavut Settlement Area;
- (d) steps which the proponent proposes to take to avoid and mitigate adverse impacts;
- (e) steps the proponent proposes to take, or that should be taken, to compensate interests adversely affected by the project;
- (f) posting of performance bonds;
- (g) the monitoring program that the proponent proposes to establish, or that should be established, for ecosystemic and socio-economic impacts; and
- (h) steps which the proponent proposes to take, or that should be taken, to restore ecosystemic integrity following project abandonment.

101. In its review of a project, the Board must take into account any traditional knowledge or community knowledge provided to it.³³

³¹ NuPPAA, s. 23

³² See for example 2018-10-31 NIRB Reconsideration Report and Recommendations: Saline Effluent Discharge to Marine Environment Proposal (NIRB File No. 11MN034), p. 1 (Filing ID 320879).

³³ NuPPAA, ss. 103(3), 121(3)(b)

102. Section 103 of the NuPPAA further provides that:

103 (1) In conducting a review of a project, the Board must take into account the following factors:

- (a) the purpose of the project and the need for the project;
- (b) whether, and to what extent, the project would protect and enhance the existing and future well-being of the residents and communities of the designated area, taking into account the interests of other Canadians;
- (c) whether the project reflects the priorities and values of the residents of the designated area;
- (d) the anticipated effects of the environment on the project, including effects associated with natural phenomena, such as meteorological and seismological activity, and climate change;
- (e) the anticipated ecosystemic and socio-economic impacts of the project, including those arising from the effects referred to in paragraph (d);
- (f) the cumulative ecosystemic and socio-economic impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out;
- (g) whether the impacts referred to in paragraphs (e) and (f) would unduly prejudice the ecosystemic integrity of the designated area;
- (h) the measures, including those proposed by the proponent, that should be taken to
 - i. avoid and mitigate adverse ecosystemic and socio-economic impacts, including contingency plans,
 - ii. optimize the benefits of the project, with specific consideration given to expressed community and regional preferences in regard to benefits,
 - iii. compensate persons whose interests are adversely affected by the project, and
 - iv. restore ecosystemic integrity after the permanent closure of the project;
- (i) the significance of the impacts referred to in paragraphs (e) and (f), taking into account the measures referred to in paragraph (h);
- (j) the capacity of renewable resources that are likely to be significantly affected by the project to meet the existing and future needs of the residents of the designated area;
- (k) any monitoring program of the project's ecosystemic and socio-economic impacts that should be established, including one proposed by the proponent;
- (l) the interests in land and waters that the proponent has acquired or seeks to acquire;
- (m) the options for carrying out the project that are technically and economically feasible and the anticipated ecosystemic and socio-economic impacts of such options;
- (n) the posting of performance bonds;
- (o) the particular issues or concerns identified under subsection 96(1); and

(p) any other matter within the Board's jurisdiction that, in its opinion, should be considered.

103. In the reconsideration, the Board is required to assess whether the proposed new facilities and activities for the Project result in changes to the effects assessment for the original project, taking into account the purposes of the Nunavut Agreement and the factors in Article 12, s.

12.5.5 of the Nunavut Agreement and section 103 of NuPPAA, and whether those effects can be prevented, mitigated, or managed if conducted under the existing Terms and Conditions of Project Certificate No. 005, and/or proposed revisions to Project Certificate No. 005.³⁴

104. For the purposes of s. 103(1), in determining the significance of impacts, the Board must take into account the following factors:

- (a) the size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts;
- (b) the ecosystemic sensitivity of that area;
- (c) the historical, cultural and archaeological significance of that area;
- (d) the size of the human and the animal populations likely to be affected by the impacts;
- (e) the nature, magnitude and complexity of the impacts;
- (f) the probability of the impacts occurring;
- (g) the frequency and duration of the impacts;
- (h) the reversibility or irreversibility of the impacts;
- (i) the cumulative impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out; and
- (j) any other factor that the Board considers relevant to the assessment of the significance of impacts.³⁵

105. As set out under s. 112(5) of NuPPAA, when the Board has conducted a reconsideration of the terms and conditions in a previously approved project Certificate, the Board is required to report to the responsible Minister(s) as follows:

- (5) Within 45 days after the end of the Board's reconsideration under subsection (1) or (2), the Board must submit a written report to the responsible Minister that contains
 - (a) an assessment of the terms and conditions in force; and
 - (b) any terms and conditions that it recommends should apply in respect of the project.

106. Section 112(6) of NuPPAA provides that the Minister shall make the decision as follows:

³⁴ See for example 2018-10-31 NIRB Reconsideration Report and Recommendations: Saline Effluent Discharge to Marine Environment Proposal (NIRB File No. 11MN034), p. 10 (Filing ID 320879).

³⁵ NuPPAA, ss. 90, 103(2).

(6) The responsible Minister must, within 90 days after receiving a report submitted under subsection (5), in respect of each term or condition recommended in that report either

(a) accept it; or

(b) reject it or vary it in any manner that that Minister considers appropriate, under section 108 or if, alone or combined with other terms or conditions,

(i) it is insufficient, or more onerous than necessary, to adequately mitigate the adverse ecosystemic and socio-economic impacts of the project, or

(ii) it is so onerous that it would undermine the viability of the project that is in the national or regional interest.

H. EVIDENTIARY BURDEN

107. During the NIRB's assessment of the Project, the burden of establishing that the Project is consistent with the objectives of the Nunavut Agreement and the NuPPAA rested with Baffinland. This means that throughout the Board's reconsideration, the onus was on Baffinland to demonstrate that any predicted adverse ecosystemic and socio-economic impacts of the Project would be prevented, mitigated, or managed if conducted under the existing Terms and Conditions of Project Certificate No. 005, and/or proposed revisions to Project Certificate No. 005.³⁶

108. In our submission, Baffinland has failed to discharge that burden and the Board should recommend against the Project proposal proceeding at this time.

I. FAILURE OF BAFFINLAND TO INCORPORATE INUIT QAUJIMAJATUQANGIT

109. Baffinland was required to integrate IQ into the FEIS, but has failed to do so.³⁷

110. The Amended Environmental Impact Statement Guidelines provided that:

The Proponent shall discuss how it weighed and incorporated TK in baseline data collection, impact prediction, and significance assessment, and the development of mitigation and monitoring programs. It shall explain how it integrated TK and popular science, including the manner in which it reconciled any apparent discrepancies between the two. It shall also include incidences where TK is being used to address gaps in currently available scientific data should be clearly identified as such. All assumptions shall be justified.³⁸

111. As indicated in previous Environmental Impact Statement Guidelines, the Board's previous decisions, and reflective of the minimum EIS requirements set out under Article 12, Section 12.5.2 of the Nunavut Agreement, IQ that "encompasses Inuit traditional knowledge

³⁶ See for example 2018-10-31 NIRB Reconsideration Report and Recommendations: Saline Effluent Discharge to Marine Environment Proposal (NIRB File No. 11MN034), p. 10 (Filing ID 320879).

³⁷For MHTO's full submissions on IQ, see 2021-01-18 MHTO Supplemental Final Written Submissions to NIRB for Baffinland's Phase 2 Proposal, p. 15 (Filing ID 332619); 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project; Response to MHTO-3, p.32 (Filing ID 334147); 2015-10-06 Amended Environmental Impact Statement Guidelines, PDF pp. 21, 53 (Filing ID 317361); NuPPAA, s. 103(3).

³⁸ 2015-10-06 Amended Environmental Impact Statement Guidelines, PDF pp. 21, 53 (Filing ID 317361).

(and variations thereof) as well as contemporary Inuit knowledge that reflects Inuit societal values and experience”, “contributes vital information to the NIRB’s assessment process”.³⁹

112. As recognized by the Board, the term IQ is meant to encompass the following:

TK broadly refers to Inuit Qaujimaningit and is meant to encompass local and community based knowledge, ecological knowledge (both traditional and contemporary), which is rooted in the daily life of Inuit people, and has an important contribution to make to an environmental assessment (Stevenson, 1996). This knowledge represents experience acquired over thousands of years of direct human contact with the environment (Berkes, 1993) and is rooted in personal observation, collective experience and oral transmission over many generations. TK relates to factual information on such matters as ecosystem function, social and economic well-being, and explanations of these facts and casual relations among them. It plays a significant role in the EIS development in term of acquisition of adequate baseline information, identification of key issues, prediction of the effects, and assessment of their significance, all of which are essential to the EIS and its review. Recognizing TK as indispensable element both as baseline information and as an Inuit lens through which impact analyses can be better understood can also result in more active and meaningful community engagement.⁴⁰

113. In other assessments IQ has played a “significant role” by “contributing to the development of accurate baseline information; comparing predictions of effects with experience; and assisting in the assessment of the magnitude of predicted effects.”⁴¹

114. In this assessment, Baffinland has failed to incorporate IQ into its assessment and determination of the significance of the effects of the Project.⁴²

115. Baffinland has not complied with section 7.11 of the Amended Environmental Impact Statement Guidelines, which provide:

In the process of significance determination, the Proponent is expected to communicate with potentially-affected communities, including relevant individuals and organizations to solicit input and incorporate their views regarding the value it placed on a VEC or VSEC, as well as associated significance of impacts. The Proponent shall describe how it will ascertain the significance that different parties assigned to each impact, and how it will proceed if different parties ascribe varying significance to VECs, VSECs or the associated impacts. If it is impossible

³⁹ 2018-10-31 NIRB Reconsideration Report and Recommendations: Saline Effluent Discharge to Marine Environment Proposal (NIRB File No. 11MN034), pp.12-13 (Filing ID 320879); as required by NuPPAA, ss.2, 103(3).

⁴⁰ 2015-10-06 Amended Environmental Impact Statement Guidelines, PDF pp. 21 (Filing ID 317361).

⁴¹ 2018-10-31 NIRB Reconsideration Report and Recommendations: Saline Effluent Discharge to Marine Environment Proposal (NIRB File No. 11MN034), p. 13 (Filing ID 320879).

⁴² “Baffinland is in the same situation. They talk about Inuit traditional knowledge, yet they are not being used because they don't have any content.· If Inuit traditional knowledge were to be used, the Mary River would not be in operation because it impacts everything automatically. When I was working for the Nunavut Planning Commission, we used to conduct mapping, and also Mary River was the area where caribou were calving, and also -- and there are a lot of places that has been impacted negatively and also fish and char.· I mean, seal have been impacted.· And if you utilize Inuit traditional knowledge, then Mary River wouldn't have been open because the IQ is just in print.” NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2347:13 - 2347:26 (Filing ID 333444) Jayko Alloo.

to attain a consensus on the significance of certain impacts, the Proponent shall present the range of viewpoints expressed and shall present and justify its preference, if any.⁴³

116. The perspectives of Inuit have not been incorporated into the significance determinations. Despite acknowledging that “it is possible that scientific monitoring may provide different results from IQ in some circumstances”, Baffinland has not indicated where its assessment based on science differs from the experience of Inuit as users of the land.⁴⁴

117. Baffinland has not reconciled differences between Inuit observations of the impacts from the existing project (including to narwhal, caribou and seal) and Baffinland’s conclusions on the significance of the impacts of the Project. Instead, Baffinland has requested corroborating data before considering IQ, completely disregarding the oral tradition of the Inuit and the “experience acquired over thousands of years of direct human contact with the environment”. MHTO members have already observed significant impacts as felt by Inuit.⁴⁵

118. In response to requests to incorporate IQ, Baffinland lists meetings where Inuit were invited and their concerns recorded, no matter how many Inuit attend, nor the context in which they attended (e.g., were they there as employees), and regardless of the subject matter of the meeting.⁴⁶ Many of these meetings relied upon by Baffinland happened before a northern railway and shoulder season shipping was on the table. In any event, recording Inuit concerns is not the same as incorporating those perspectives into Project plans, effects assessments, significance determinations, mitigations measures, and adaptive management and monitoring plans.

119. Baffinland has ignored the IQ that has been shared about the lived experience of Inuit with development in the territory and the existing impacts in order to conclude that the Project will not have significant adverse impacts on key species and harvesting practices. As a result of this disregarding of the Inuit perspective, Baffinland has underestimated the effects of the Project on harvesting rights and not shown that it can prevent, mitigate or manage the significant impacts of the Project.⁴⁷

⁴³ 2015-10-06 Amended Environmental Impact Statement Guidelines, PDF p. 57 (Filing ID 317361).

⁴⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project; Response to MHTO-3, p.32 (Filing ID 334147).

⁴⁵ “But when we can't provide them with certainty about impacts that are proven, a verified system of Inuit knowing has -- documented for generations, they say, Well, unless you have more evidence or something written down, Baffinland will take this as your suggestion or your experience. Thank you very much. And that's it.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1907:8 - 1907:14 (Filing ID 333443) Eric Ootoovak, MHTO.

⁴⁶ QUESTION “...has Baffinland ever provided in a letter or an email to the [MHTO] indicating that their participation would be considered as a contribution of specific [IQ]?” NIRB Public Hearing Transcripts for February 1, 2021, Vol. 7, pp. 1333:11 - 1333:15 (Filing ID 333451) Amanda Hanson-Main, MHTO.

RESPONSE: “...I'm not sure if that has ever happened in the past, not to my knowledge.” Megan Lord-Hoyle, Baffinland, 1333:18 - 1333:19.

⁴⁷ “Baffinland has not assessed impacts to Inuit harvesting practices in a way that reflects the Inuit Qaujimajatuqangit we and our community have offered. Baffinland's assessment and monitoring decisions are made using very limited science modelling or estimates, often using science that doesn't have great amount of certainty or confidence.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1927:14 - 1927:20 (Filing ID 333443) Eric Ootoovak, MHTO; NuPPAA, ss.103(h).

120. IQ is a holistic system that must be applied to these important decisions concerning the Project that will impose major changes on Inuit reality. Baffinland has failed in its obligation to do so.⁴⁸

J. THE PROJECT WILL HAVE SIGNIFICANT ADVERSE IMPACTS ON MITTIMATALINGMIUT HARVESTING RIGHTS

1. Failure to Assess Impacts to Harvesting Rights

i) Gaps in Baffinland's Assessment

121. A gap in the assessment that transcends all of Baffinland's application material is the failure to adequately assess impacts to Inuit harvesting rights. This is a fatal error that prevents the Board from determining that the Project reflects the priorities and values of the residents of the designated area and would protect and enhance the existing and future well-being of the residents and communities of the designated area.⁴⁹ It further prevents the Crown from relying on the Board's process to discharge the duty to consult and accommodate.

122. There is evidence that the existing project is having a significant impact on harvesting rights.⁵⁰ Baffinland has not incorporated these impacts that have been observed by Inuit into its impact assessment or adequately assessed impacts to harvesting rights at scales that are meaningful to Inuit.

123. Baffinland has not adequately collected or incorporated IQ into its assessment. Baffinland admits that "Baffinland does not currently have a formal monitoring program to assess impacts to harvesting."⁵¹ Further, Baffinland has not collected data on project harvesting interactions or hunter effort.⁵²

⁴⁸ "I think the best way to end this rather than arguing -- because as I understand IQ, you don't argue about things, especially around food -- is just to say, if this was being done properly, we wouldn't be having the same questions and concerns for the past 15 years, and that you'll know when you get it right because these guys will let you know when you get it right." NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2298:10 - 2298:16 4 (Filing ID 333444) Shelly Elverum.

RESPONSE: "I agree." Udlu Hanson, Baffinland, 2298:20.

⁴⁹ Nunavut Agreement, Article s. 12.5.5; NuPPAA, s. 103(1)(b), (c), (e), (f), (g), (i).

⁵⁰ In 2009, we -- our harvest of narwhals was healthy. We had an abundance of char, seals, and walrus. That were the main hunting activity. Since then 6 metric tonnes was removed. We saw huge reductions in numbers of harvest. Last year in 2017, 2018, and '19, we had very few narwhals hunted, harvested, and seals harvested. It's been at that level, and no caribou being harvested. For that reason, as environment departments, because you deal with Nunavut or environmental impacts, these are -- can be verified how much reduction we have seen in harvest. Baffinland says no change have taken place. From our observation, no way. NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2267:14 - 2267:26 (Filing ID 333444) Caleb Sangoya.

⁵¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-35, p. 57 (Filing ID 334147).

"The Qikiqtani Inuit Association found that Inuit Qaujimajatuqangit collection methods were outdated and yielded an incomplete data set for marine mammals, and there was also weak consideration given to the input from the Mittimatalik harvesters." NIRB Public Hearing Transcripts for February 4, 2021, Vol. 10, pp. 1736:6 - 1736:19 (Filing ID 333454) Richard Paton, QIA.

⁵² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA – 22, p. 26; See also MHTO-28(2), p. 53 (Filing ID 334147).

124. Despite acknowledging that “monitoring the impacts of its project on the Inuit harvest of narwhals, seals, and Arctic char is important”, Baffinland states that “[t]here are no existing early warning indicators for impacts to Inuit harvesting (per level of effort) of seal and narwhal in Baffinland’s management plans, nor is there any requirements for these to be in place.”⁵³

125. Prior to applying for expansion of its operations, Baffinland should have meaningfully engaged with Inuit to understand how the existing project is impacting harvesting rights, food security and hunting effort. Baffinland did not do this. Baffinland’s conclusions in its assessment are contrary to what Inuit are experiencing with the existing project and based on inadequate and outdated data collection.

126. As stated by James Simonee in the public hearing:

I also understand that hunters and Elders in our community of Mittimatalik and other communities have noticed many changes since the mines started and have always expressed concerns over and over to Baffinland and have always been raised as a concern when Inuit Qaujimagatuqangit is being discussed. I sometimes feel -- or do feel that Baffinland do not take seriously things such as Inuit Qaujimagatuqangit, of the impact we face as Inuit during their activities. I also feel that the words of our Elders are not taken seriously or equally. Our Elders were here before the mine came here, and have always been here before the mine started. The words of our Elders are true and have themselves seen it firsthand what the land, waters, and animals were like before, and I believe the Elders, as they have lived in the area where mining is taking place.⁵⁴

127. The failure of Baffinland to collect data on Inuit harvesting and how that has been impacted by the existing project makes it impossible to analyze trends over time and significantly undermines the credibility of Baffinland’s impact assessment for the Project. Appropriate baseline data needs to be collected before conclusions on impacts to harvesting are made.

128. Despite this lack of data collection and monitoring, Baffinland makes a number of broad and unsubstantiated assumptions in its application material. Baffinland states that “[r]esults to date are consistent with FEIS predictions, suggesting, Inuit land use activities coexist with the Project, as local land users continue to access Project sites.”⁵⁵ This is contrary to Inuit experiences with the Project, including the interruption of their harvesting rights by the avoidance of hunting areas by key species such as narwhal.⁵⁶

129. For narwhal, Baffinland looks at harvest data from 2013 to 2015 and the population level assessment of impacts to narwhal, to make the broad conclusion that “the Phase 2 Proposal is

⁵³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-22, p. 49 (Filing ID 334147).

⁵⁴ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1910:3 - 1910:19 (Filing ID 333443) James Simonee.

⁵⁵ 2018-10-03, FEIS Addendum-Main Document, PDF p. 101 (Filing ID 320619).

⁵⁶ “From our observations, narwhals calving were often a daily site. The 6 million tonnes, when it was upon its approval, we haven't seen any calving, and we haven't seen any mating, and we haven't seen any narwhals playing. We see it totally reversed.” NIRB Public Hearing Transcripts for February 6, 2021, Vol.12, pp. 2269:10 - 2269:15 (Filing ID) Caleb Sangoya.

unlikely to affect the harvesting of marine mammals.”⁵⁷ MHTO notes that this time period was before shipping intensified and prior to the use of ice-breakers. Baffinland does not account in their assessment for the reports from Inuit of narwhal avoiding the area and of skinny narwhal (discussed further below), despite Baffinland acknowledging during the hearing they have received this feedback from Inuit.⁵⁸ Instead, Baffinland points to the increasing Fisheries and Oceans Canada (“DFO”) harvesting quota as evidence that narwhal harvesting is not being impacted, without acknowledging the fact that the quota has been increasing because tags are not filled and unfilled tags get added to the year following.

130. Baffinland further underestimates the impacts of the Project on caribou harvesting. Baffinland notes the potential for a linear disturbance such as the railway to result in a barrier to movement, but then goes on to state that “[g]iven 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”.⁵⁹ Baffinland does not account for the possibility that the Project will deter caribou returning to the area and the consequent impacts to the reliance on caribou as a country food, or alternatively, caribou returning to the area and consequent impacts to harvesting if the railway serves as a barrier to movement.

131. The railway will bisect harvesting areas for Inuit. Along with the Tote Road, the railway will serve as a barrier for crossings by snowmobiles and all-terrain vehicles, and seriously encumber east/westerly travel for Inuit. Yet, without considering the Inuit perspective, and without sufficient support for its finding, Baffinland concludes that “[t]he railway is assessed to have a low magnitude effect on the difficulty and safety of travel.”⁶⁰

132. Further, in response to a question from MHTO, Baffinland was not able to point to where in its materials it has considered the psychosocial impacts of the perception of the contamination of country foods and the resulting impacts to hunting, fishing, camping, country food consumption, skin preparation and traditional sewing.⁶¹ Baffinland fails to appreciate that the lack of physical interruption does not mean that the practice has not been impacted.

133. Perceptions of contamination, safety concerns and sensory disturbance while harvesting can have a significant impact on the practice of harvesting rights. Inuit do not want to harvest in areas that are perceived to be unclean or unsafe. Having to travel farther from the community to harvest comes at a significant cost to Inuit and to cultural transmission that occurs at the sites that have been traditionally used for harvesting. It also presents serious concerns regarding safety - Inuit having to travel longer distances from home to harvest in alternative locations may come with serious risks. Baffinland has not adequately assessed these impacts.

⁵⁷ 2018-10-03 Baffinland Technical Supporting Document 25: Socio-Economic Assessment, p. 125 (Filing ID 320585).

⁵⁸ NIRB Public Hearing Transcripts for January 29, 2021, Vol. 5, pp. 1008:14 - 1008:22 (Filing ID 333449) Phil Rouget.

⁵⁹ 2018-10-03 Baffinland Technical Supporting Document 25: Socio-Economic Assessment, p. 126 (Filing ID 320585).

⁶⁰ 2018-10-03 Baffinland Technical Supporting Document 25: Socio-Economic Assessment, p. 134 (Filing ID 320585).

⁶¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-34, p. 57 (Filing ID 334147).

134. For species relied upon for harvesting, Baffinland has used metrics at scales that are not meaningful to Inuit harvesting rights. For example, the environmental assessment methodology sets out that “[i]f the geographic extent of the effect is confined to the PDA or LSA, then the predicted effect is likely to be ‘not significant’”.⁶² However, an effect that results in species relied on for harvesting rights not entering the local study area as frequently, or at all, will have a significant effect on MHTO members’ harvesting rights. Baffinland does not account for this in its effects predictions.

135. Assessing effects on overall population levels does not capture the impacts to harvesting rights. As an example, for the assessment of icebreaking operations, it is noted that “approximately 70 to 200 ringed seal in Milne Inlet and Eclipse Sound will exhibit avoidance of the icebreaking noise source per ice-breaker transit, this represents <1 % of the population of ringed seals in the Canadian Arctic”.⁶³ The Canadian Arctic is not a useful scale for impacts to harvesting rights that are practiced locally and are entirely dependent on local populations.

136. If critical species avoid areas that MHTO members have traditionally relied upon for hunting, MHTO members will not be able to sustain themselves, resulting in a clear infringement of their constitutionally protected treaty rights.⁶⁴ Similarly, if members are not able to access traditional hunting grounds due to late formation of the sea ice or safety concerns because of increased marine shipping and rail transport, MHTO members will not be able to harvest.

137. If a hunter who normally expends 10 days hunting narwhals, has to expend 30 days for the same harvest, or has an unsuccessful harvest, then it does not matter whether Baffinland concludes that the overall population has not experienced significant impacts, Inuit have experienced a significant impact to their treaty rights.

ii) Proposed Studies have not been completed

138. The ICA provides for a CRLU Assessment and Food Security Assessment.⁶⁵ These studies were necessary due to the lack of Inuit involvement with the assessments undertaken by Baffinland, lack of incorporation of IQ, and the disagreement of Inuit with the credibility of and the conclusions in Baffinland’s assessments.⁶⁶ These studies are proposed, but have not yet been completed, and will not be completed until a later date post-approval of the Project.⁶⁷

⁶² 2018-10-03 FEIS Addendum Appendices - Appendix 1, FEIS Volume 2, Section 3: Assessment Methodology, p. 274 (PDF p. 55) (Filing ID 320620).

⁶³ 2019-05-17 Golder Report: Baffinland Iron Mines Corporation Mary River Project – Phase 2 Proposal: Assessment of Icebreaking Operations during Shipping Shoulder Seasons on Marine Biophysical Valued Ecosystem Components (VECs) 1663724-102-R-Rev1-30000 (Filing ID 325033).

⁶⁴ See for example *Yahey v. British Columbia*, 2021 BCSC 1287.

⁶⁵ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 6 Phase 2 Culture, Resources and Land Use (CRLU) Assessment and ID 7 Pond Inlet Country Food Baseline, p.90 and p.101 (Filing ID 332869).

⁶⁶ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 6 Phase 2 Culture, Resources and Land Use (CRLU) Assessment, ss. 6.1.1, 6.1.3, 6.1.7 at p.101 (Filing ID 332869).

⁶⁷ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(16), PDF p. 18 (Filing ID 334156); 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-9(4), PDF p. 22 (Filing ID 334156).

139. QIA has done some work to collect baseline information on treaty rights in the Tusaqtavut studies.⁶⁸ However, QIA “continues to assert that impacts to Culture, Resources and Land Use (CRLU) have been inadequately assessed to date (and more study is required), and that in addition, mechanisms must be put in place for proper CRLU impacts monitoring.”⁶⁹

140. The Pond Inlet Tusaqtavut Study provides the perspectives of the 35 individuals interviewed on Inuit land use and values, and the changes that Inuit have observed with the current project activities. The study was necessary due to the “lack of extensive, up-to-date, and detailed information gathered from Inuit by the Proponent”.⁷⁰ The covering letter notes the inadequacy of IQ collection as follows:

it was largely self-directed and controlled by the Proponent; the data is out-dated (especially in light of its relative age and the altered state of the Project components since the data was gathered); and the coarse scale of the mapping and infrequent use of individual interviews without any incorporation of the ongoing use of IQ in community based monitoring provides limited value.⁷¹

141. The study reveals that Baffinland underestimated impacts from the Project.⁷² The Tusaqtavut study for Pond Inlet is “limited to a sample of community from Pond Inlet” and does not constitute a “full effects characterization”.⁷³

142. The study recommends a full “[a]ssessment 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.”⁷⁴ This still remains outstanding for the Project. Baffinland has not integrated the information in the study in an update to its impact assessment, including its predictions on significance and mitigations.⁷⁵

143. Thus, the Board does not have an adequate impact assessment to harvesting rights before it that includes consideration of the “cumulative ecosystemic and socio-economic impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out.”⁷⁶ The gaps in the assessment

⁶⁸ 2019-06-14 Tusaqtavut Study Pts1-7 (Filing IDs 325450-325456).

⁶⁹ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-9(4), PDF p. 22 (Filing ID 334156).

⁷⁰ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 2-3 (Filing ID 325448).

⁷¹ 2019-06- QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 2-3 (Filing ID 325448).

⁷² 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 3-4 (Filing ID 325448).

⁷³ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 3, 5 (Filing ID 325448).

⁷⁴ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, p. 5 (Filing ID 325448).

⁷⁵ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-3(2), PDF p.13 (Filing ID 334156); 2021-02-02 Inuit Certainty Agreement: Schedule A ID 6 Phase 2 Culture, Resources and Land Use (CRLU) Assessment, ss. 6.1.7 at p.101 (Filing ID 332869).

⁷⁶ NuPPAA, s. 103(f), (i).

have been acknowledged, but they have not been addressed by Baffinland in a revised assessment.

144. Baffinland has not adequately considered and captured the cumulative impacts to harvesting rights that could result from the impacts of the Project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out – including present operations of Baffinland.

145. This is essential information for the Board to consider in making a recommendation on the Project. Without this information, the Board cannot gauge and define the extent of the impacts of the Project consistent with the objectives of the Nunavut Agreement and NuPPAA.⁷⁷

iii) Inuit are Observing Significant Impacts

146. The Tusaqtavut Study details the importance of the area for the proposed Project that has been relied upon by Inuit for generations. Among other things, the area is an essential area for the harvesting of wild foods including marine mammals (including ringed seal and narwhal), terrestrial mammals (including caribou), fishing and Inuit cultural continuity.⁷⁸

147. The existing project has had a significant impact on the ability of Inuit to use the lands and waters they rely upon for harvesting. As detailed below in the specific impact sections, since shipping for the existing project began, Inuit have observed impacts to harvesting, including the abundance and health of marine and terrestrial mammals relied upon for harvesting, reduced harvesting success, impacts to travel inland and on the sea ice, and disturbance of harvesting areas.

148. Inuit report that the balance has been lost. While wildlife used to live in harmony with nature, since marine shipping, trucking and production has increased for the project, the wildlife are moving away from the disturbance and noise.⁷⁹

⁷⁷NuPPAA, s. 103(f), (i).; Nunavut Agreement, s. 12.5.5.

⁷⁸ 2019-06-14 Tusaqtavut Study-Pt 1, p. 3 (Filing ID 325450).

“So for the narwhals that are disappearing, what -- what am I going to teach my children? So my children, if they are grown, they will have limited knowledge. What are they going to teach their children? So this is a big concern. In terms of [IQ], we could disappear completely. // “The things that -- the benefits that you are providing here, the benefits you're talking about, are they sufficient to replace that loss? If you were to lose your language and your knowledge about things and your food and your clothing, if you are going to lose those sorts of things in that same instance, the benefits that you are providing, is it sufficient?” // “So to Nunavut Tunngavik and [QIA], to the Government of Nunavut, please understand clearly that we are deeply concerned, and they should be concerned as well. Yes. We want employment. We know that a few people work there. We already know that, that only a few people would work there. We are not iron mine -- we're not all miners, so the whole community will be affected and the generations after them will be affected. We need to consider that.” NIRB Public Hearing Transcripts for January 30, 2021, Vol. 6, pp. 1098:13 - 1098:19 // 1098:24 - 1099:5 // 1099:11 - 1099:20 (Filing ID 333459) Enookie Inuarak, MHTO.

⁷⁹ 2019-09-30 MHTO Final Written Submissions, p.14 (Filing ID 326941); 2021-01-19 MHTO Supplemental Final Written Submissions, pp. iii, 4, 7, 30-31 (Filing ID 332619); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 49-50 (Filing ID 32543); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2269:10 - 2269:15 (Filing ID 333444); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2340:15 - 2340:20 (Filing ID 333444); 2019-06-14 Tusaqtavut Study-Pt 1, p. 4-5 (Filing ID 325450); NIRB Public Hearing Transcripts for

149. Baffinland has not adequately considered or grappled with these impacts in its assessment, or justified why its conclusions differ from Inuit observations. From what is known about existing project operations, the expanded operations will have a significant adverse impact on Inuit and the ecosystemic integrity of the area.⁸⁰

150. The Tusaqtavut Study sets out the impact pathways for the Project to marine hunting, terrestrial hunting and trapping, fishing and fresh water, travel and trails, and cultural continuity values.

151. The Project has the potential to impact marine harvesting, including by:

- Impacts to marine ice, water and sediment quality primarily from activities at and around the Milne Inlet Port and increased marine shipping;
- Avoidance of areas by marine mammals and harvesters due to activities at and around the Milne Inlet Port and the Northern Shipping Route (which includes Baffin Bay, Eclipse Sound, Pond Inlet, and Milne Inlet);
- Impacts to marine species health and impacts to habitat loss and changes in habitat due to activities at and around the Milne Inlet Port and the Northern Shipping Route;
- Acoustic disturbances from shipping activities throughout the Northern Shipping Route, including at and around the Milne Inlet Port;
- Risks of mortality from vessel strikes and increased vessel interactions due to shipping throughout the Northern Shipping Route;
- Loss of wildlife habitat, including critical narwhal calving environments due to acoustic disturbance from ship traffic;
- Loss of use or avoidance of preferred areas for hunting due to decreased abundance and/or increased avoidance or displacement of preferred species (such as narwhal and seal); and
- Loss of use or avoidance of preferred areas for hunting due to safety concerns and restrictions on access.⁸¹

January 30, 2021, Vol. 6, pp. 1075:1 - 1075:18 (Filing ID 333450); 2019-06-14 Tusaqtavut Study-Pt 6, pp.120-122 (Filing ID 326998).

⁸⁰ Nunavut Agreement, Article s. 12.5.5; NuPPAA, s. 103(1)(b), (c), (e), (f), (g).

⁸¹ 2019-06-14 Tusaqtavut Study-Pt 1, pp. 3-4 (Filing ID 325450); NIRB Public Hearing Transcripts for January 30, 2021, Vol. 6, pp. 1112:26 - 1113:9 (Filing ID 333450); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1912:9 – 1912:21 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:19 – 1944:25 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1947:21- 1947:24 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1951:1 - 1951:9 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1951:18 - 1952:15 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1956:16 - 1957:4 (Filing ID

152. Further, the Project has the potential to impact terrestrial harvesting, including by:

- Increased dust from the Tote Road;
- Alterations to, and loss of, terrestrial habitat from all aspects of the mine operation including overland transportation components;
- Barriers to movement for wildlife including from mine-related activities;
- Risk of caribou mortality and morbidity due to truck and train collisions;
- Impacts to caribou health, including impacts related to sensory disturbance and contamination;
- Loss of use or avoidance of preferred areas for harvesting and trapping due to safety concerns and restriction of access; and
- Impacts on the abundance, distribution, and movement patterns and behaviour of wildlife, particularly caribou, due to factors including acoustic disturbance, resulting in reduced harvesting success.⁸²

153. The Project has the potential to impact fishing and drinking freshwater from the land, including by:

- Impacts to quality and quantity of freshwater from activities associated with the Tote Road and mine site;
- Impacts to the health and condition of fish (Arctic char) due to changing water quality and impacts from activities at the Milne Inlet Port including impacts associated with shipping;
- Habitat loss and alteration in both marine and freshwater environments for Arctic char due to activities related to the Milne Inlet Port, North Railway, and Tote Road, leading to a decline in fish populations; and

333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1955:14 – 1955:17 (Filing ID 333443).

⁸²2019-06-14 Tusaqtavut Study-Pt 1, p. 4 (Filing ID 325450); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:2 – 1934:7 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:18 - 1934:23 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1935:25 – 1936:2 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1936:3 - 1936:7 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1937:26 – 1938:11 (Filing ID 333443); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2243:3 – 2243:9 (Filing ID 333444).

- Species avoidance of areas due to impacts to fish habitat and diminished water quality.⁸³

154. The Project has the potential to increase harvesting effort, including by:

- Damage to travel equipment due to crossing the North Rail and Tote Road, dust from crushing activities (at Mine Site and Milne Inlet), interruptions in ice formation, travel to lesser preferred, more distant, and potentially unsafe alternative locations;
- Sensory disturbances and impacts to safety;
- Impacts to safe inland travel from mine-related activities;
- The loss of or alteration of traditional caribou trails due to the North Railway;
- Impacts to ground disturbance from the Milne Port and Phase 2 activities;
- Impacts to caribou harvesting and marine mammal harvesting due to Phase 2 activities generally;
- Changes in access to preferred hunting, trapping and camping areas due to disruption from truck and rail traffic; and
- Potential changes to access due to interference with the primary trail to hunting areas and other communities by the North Railway.⁸⁴

155. The Project has the potential to impact cultural continuity as follows:

- Changes in access to and the availability of harvesting resources due to a loss of access, a loss of cabins and camps for hunting, and impacts to the availability of mammals (caribou and narwhal in particular) due to mine-related activities;
- Changes in access to travel corridors, cabins, and camps due to mine-related activities including the North Rail, Tote Road and marine shipping;
- Loss of archaeological sites due to ground disturbance from the terrestrial mine related activities;
- Decline in the availability of skins and other materials used to prepare, sew, and teach about the creation of traditional clothing and harvesting tools, including the loss

⁸³2019-06-14 Tusaqtavut Study-Pt 1, pp. 4-5 (Filing ID 325450); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1938:26 – 1939:3 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1941:19 - 1942:1 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:2 – 1944:18 (Filing ID 333443).

⁸⁴ 2019-06-14 Tusaqtavut Study-Pt 1, p. 5 (Filing ID 325450); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1913:2 – 1913:5 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1930:11 - 1930:26 (Filing ID 333443).

of those skills and cultural items over time, and the loss of language and terminology specific to the practice of preparing and learning about traditional garment and harvesting tools; and

- Loss of other culturally important gathering sites, tent rings, and other sites due to ground and ice disturbance from the mine, road, and proposed rail and shipping traffic.⁸⁵

156. These impact pathways need to be understood in light of the already existing impacts to treaty rights. Recommended in the cover letter to the Tusaqtavut Study as next steps to understand the impacts of the Project on harvesting rights in Pond Inlet are the following:

- 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;
- Consideration of the appropriateness of specific proposed physical works and activities in relation to the Phase 2 Proposal, and of current mitigation commitments by the Proponent, during an assessment of effects; and
- Properly entrenching IQ into the monitoring and adaptive management systems for the Project overall, including developing mechanisms to gather information on, and manage cumulative effects.⁸⁶

157. The only reasonable conclusion that can be drawn, based on what has been heard in submissions during the hearing and ongoing assessment of Mary River, and as supported by findings of the Tusaqtavut Study is that, prior to a recommendation on the Project, significant additional work needs to be undertaken to understand the full extent of the impacts of the Project in conjunction with the existing cumulative impacts on treaty rights, and the development of feasible and effective mitigation measures to address these impacts.⁸⁷

158. Based on the experience of Inuit as put before the Board, what is known is that the adverse impacts of the Project on harvesting rights will be significant. Baffinland has not shown that it can prevent, manage and mitigate these impacts when properly characterized.

2. Impacts of increased Marine Shipping and Icebreaking

159. Baffinland has continued to put forward its plan to significantly increase shipping and to ship during the shoulder seasons using ice-breakers, despite concerns from Inuit groups (and others) and reported impacts to harvesting from the existing shipping and use of ice-breakers.

⁸⁵ 2019-06-14 Tusaqtavut Study-Pt 1, p. 5 (Filing ID 325450); NIRB Public Hearing Transcripts for January 30, 2021, Vol. 6, pp. 1075:1 - 1075:18 (Filing ID 333450); 2019-06-14 Tusaqtavut Study-Pt 6, pp.120-122 (Filing ID 326998).

⁸⁶ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, p. 5 (Filing ID 325448).

⁸⁷ NuPPAA, ss. 103(1)(e), (f), (g).

160. The marine environment and the sea ice are critically important to the ability of Inuit to harvest and to travel to areas traditionally used for camping, fishing, hunting, and gathering. It further serves as important habitat for marine mammals on which Inuit depend for sustenance and cultural continuity.

(i) Lack of Assessment and Authorization for Icebreaking

161. In 2017, Baffinland provided correspondence to the Board indicating that they would be using an ice-breaker vessel to safely escort ships through the Northern Shipping Route during the shoulder season. However, as the Board noted in the 2019-2020 Annual Report, through the Early Revenue Phase, Production Increase, and Production Increase Extension Request, “no formal assessment of the potential effects of these activities has occurred.”⁸⁸

162. In response to the unauthorized icebreaking, the Board requested that:

Baffinland provide an assessment of the ongoing ice-management activities using the icebreaker (MSV Botnika) including the potential effects of these activities on noise levels and marine mammal activity along the Northern Shipping Route within 60 days, subject to the outcome of the Marine Monitoring Workshop recommendations. Also within the 60 day time frame, Baffinland must update a management plan of their choosing to include this additional information on impacts along with historical ice-information in order to inform the use of the ice-breaker vessel.⁸⁹

163. Despite these requirements from the Board, the extent of the impacts of the marine shipping and icebreaking operations still remain poorly understood. Baffinland has not provided information, data and/or analyses to support its conclusion of “not significant” effects. The construction of a railway to Milne Port and shipping of ore via the Northern Shipping Route was originally rejected as a viable alternative due to the risks of shipping through the ice.⁹⁰

164. In its application before the NPC, Baffinland withdrew the Project proposal for a winter sealift from December 1 to February 28 due to concerns from the community about icebreaking.⁹¹

165. The issue of icebreaking for the Project outside the winter sealift was not considered by the NPC. In response to a clarification request by QIA, in relation to the request to amend the North Baffin Regional Land Use Plan (“NBRLUP”), asking “is icebreaking only contemplated during the time period between December and February”,

⁸⁸ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 43 (Filing ID 332232).

⁸⁹ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 43 (Filing ID 332232).

⁹⁰ 2018-10-03 TSD 1-Alternatives Analysis Report, PDF p. 15 (Filing ID 320552).

⁹¹ 2018-05-29 Nunavut Planning Commission Conformity Determination, p. 3 (Filing ID 318134)

Baffinland responded that “ice-breaking will be limited to December through February as proposed”.⁹²

166. In the conformity decision for the Project, the NPC summarized the shipping for the Project as only encompassing the following “ore shipping season is proposed to be from July 01 to November 15, but would be adapted annually in consultation with the Pond Inlet Hunters and Trapper Organization (HTO) based on ice conditions and thickness.”⁹³ The NPC went on to note “that winter sealift is not included in this proposal, because on October 24, 2017, due to concerns expressed by the communities regarding ice breaking, the proponent has removed the winter sealift component from the original application.”⁹⁴

167. As amended, the Mary River Transportation Corridor in Appendix P to NBRLUP is currently restricted to “transportation by road, rail, and open water shipping and navigation, including for the purpose of servicing the operation of the Mary River Mine Site”.⁹⁵ The NPC expressly states that “the marine component of the Mary River Transportation Corridor does not include winter shipping through ice.”⁹⁶

168. In the amendment decision for the NBRLUP, the NPC emphasized that even if a transportation corridor exists, a proponent must apply to amend the corridor “to add any new transportation uses to the corridor that were not previously considered”.⁹⁷ In the amendment, the NPC emphasized that it is only for “the purposes of road, rail, and open water transportation projects proposed within the Mary River Transportation Corridor, section 3.5.11 and 3.5.12 of the North Baffin Regional Land Use Plan are considered satisfied, and no further applications to amend the plan for development of a corridor are required”.⁹⁸ The NPC noted that it “has not publicly reviewed an application for a winter sealift (icebreaking) corridor and doesn’t recommend the NBRLUP include a winter sealift corridor.”⁹⁹

⁹² 2017-09-26 Baffinland Response to QIA Clarification Requests Request to Amend the North Baffin Regional Land Use Plan, request 9(d) available at [file:///C:/Users/Michelle/Downloads/2017-09-26%20-%20NBRLUP%20Amend%233-%20Mary%20River%20Phase%20II%20Expansion-%20BIMC%20Response%20to%20QIA%20Request%20for%20Clarification%20re%20NBRLUP%20Amendment%20%233%20\(1\).pdf](file:///C:/Users/Michelle/Downloads/2017-09-26%20-%20NBRLUP%20Amend%233-%20Mary%20River%20Phase%20II%20Expansion-%20BIMC%20Response%20to%20QIA%20Request%20for%20Clarification%20re%20NBRLUP%20Amendment%20%233%20(1).pdf)

⁹³ 2018-05-29 Nunavut Planning Commission Conformity Determination, p. 3 (Filing ID 318134)

⁹⁴ 2018-05-29 Nunavut Planning Commission Conformity Determination, p. 3 (Filing ID 318134)

⁹⁵ 2018-05-29 Notice of Approval of Amendment No. 3 to the North Baffin Regional Land Use Plan, PDF p. 6 available at [file:///C:/Users/Michelle/Downloads/2018-05-29%20Notice%20of%20Approval%20of%20NBRLUP%20Amendment%20No%203%20\(1\).pdf](file:///C:/Users/Michelle/Downloads/2018-05-29%20Notice%20of%20Approval%20of%20NBRLUP%20Amendment%20No%203%20(1).pdf)

⁹⁶ 2018-05-29 Notice of Approval of NBRLUP Amendment No. 3, PDF p. 6 available at [file:///C:/Users/Michelle/Downloads/2018-05-29%20Notice%20of%20Approval%20of%20NBRLUP%20Amendment%20No%203%20\(1\).pdf](file:///C:/Users/Michelle/Downloads/2018-05-29%20Notice%20of%20Approval%20of%20NBRLUP%20Amendment%20No%203%20(1).pdf)

⁹⁷ 2018-03-18 Nunavut Planning Commission – North Baffinland Land Use Plan Amendment Application – Report on Public Review – Amendment Application relating to Mary River Project, paras. 88-89 available at [file:///C:/Users/Michelle/Downloads/2018-03-18%20NPC%20Public%20Hearing%20Report%20NBRLUP%20Amendment%20No%203%20\(2\).pdf](file:///C:/Users/Michelle/Downloads/2018-03-18%20NPC%20Public%20Hearing%20Report%20NBRLUP%20Amendment%20No%203%20(2).pdf)

⁹⁸ 2018-05-29 Notice of Approval of NBRLUP Amendment No. 3, PDF p. 7 available at [file:///C:/Users/Michelle/Downloads/2018-05-29%20Notice%20of%20Approval%20of%20NBRLUP%20Amendment%20No%203%20\(1\).pdf](file:///C:/Users/Michelle/Downloads/2018-05-29%20Notice%20of%20Approval%20of%20NBRLUP%20Amendment%20No%203%20(1).pdf)

⁹⁹ 2018-03-18 Nunavut Planning Commission – North Baffinland Land Use Plan Amendment Application – Report on Public Review – Amendment Application relating to Mary River Project, paras. 88-89 available at

169. Thus, despite undertaking icebreaking activities, Baffinland has not directly put icebreaking before the NPC or the Board. The undertaking of any icebreaking would be a new use that would require a new amendment application and conformity decision. As such, if any approval for the Project is provided, it must be restricted to open water shipping, and include clear language that Baffinland must apply for separate approval if it wishes to engage in any icebreaking activities.

(ii) Impacts of Marine Shipping and Icebreaking are Already Significant

170. As detailed below, Inuit have reported that key species such as narwhal and seal have moved out of the area since shipping and the use of ice-breakers began and that they are experiencing significant adverse impacts to harvesting. Baffinland has ignored these concerns from Inuit about the decline in marine mammals available for harvesting and has suggested other factors are responsible for these impacts without providing any evidence to support its theories.

171. Comprehensive monitoring of valued ecosystemic components of concern to communities has not been undertaken. Further, the monitoring that has taken place has not been incorporated into the effects assessment for the Project. The latest monitoring data for the existing project confirms what Inuit have been saying with respect to the decline in narwhal abundance in Eclipse Sound.¹⁰⁰

172. Without integration of the community reported impacts, Baffinland's conclusions with respect to marine shipping and use of ice-breakers lack sufficient support and underestimate the impacts of shipping and consequent icebreaking. IQ does not support the conclusion of "not significant" effects to narwhal, seal, and Inuit harvesting from shipping and use of ice-breakers.

173. IQ reports that the existing project has had a significant role in decreasing marine mammal abundance. This must be grappled with prior to considering vastly expanding shipping and the use of ice-breakers with the Project.

174. Baffinland has not demonstrated that it can prevent, manage or mitigate the significant adverse impacts of increased marine shipping and use of ice-breakers, which would unduly prejudice the ecosystemic integrity of the area, contrary to the objectives of the Nunavut Agreement and NuPPAA.¹⁰¹ Inuit are experiencing significant adverse impacts at the current levels of shipping that have not been mitigated. These impacts should be understood and addressed before considering any expansion.

175. However, if the Project is to be recommended for approval at this time despite these information gaps, shipping should be restricted to the open water season only, and shipping during the shoulder seasons (where ice management is required) and icebreaking must be

file:///C:/Users/Michelle/Downloads/2018-03-

18%20NPC%20Public%20Hearing%20Report%20NBRLUP%20Amendment%20No%203%20(2).pdf.

¹⁰⁰ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 37 (Filing ID 334440).

¹⁰¹ Nunavut Agreement, Article s. 12.5.5; NuPPAA, ss. 103(1)(b), (c), (e), (f), (g), (h), (i), 103(2)

avoided.¹⁰² Further, IQ and ecological factors should be used to determine the open and closing of the shipping season.

176. Due to the recent narwhal decline, Baffinland did not undertake icebreaking for the 2021 shipping season at the opening of the shipping season, but did propose to undertake icebreaking in the Fall.¹⁰³ If the Project is to be recommended to proceed, contrary to the submissions of MHTO with respect to the significant information gaps and risks, this change should be made permanent and icebreaking must not be permitted in the shoulder seasons at the opening and close of shipping for the reasons above. The Eclipse Sound narwhal stock has already been shown to be sensitive to acoustic disturbance, and Baffinland has not shown that it can mitigate the effects of the vast increase in shipping, and any associated icebreaking.

3. Impacts of the Project on Narwhal and Narwhal Harvesting

177. Narwhal are essential to the way of life of MHTO members.¹⁰⁴

178. Despite being aware that narwhal are critical to Inuit survival, Baffinland has not undertaken the monitoring or research necessary to understand how marine shipping and icebreaking has and will impact narwhal.¹⁰⁵

179. As highlighted by a number of intervenors, there remain a number of gaps and inconsistencies in the materials provided by Baffinland. Key information has not been gathered or considered to understand the impacts of the Project on narwhal.

180. In the assessment for the original Mary River project, the effects of marine shipping on narwhal were predicted as not significant with a low confidence rating. In this assessment, Baffinland again concludes that effects will not be significant, but now with a moderate confidence rating, despite data gaps with respect to the impacts on narwhal from increased marine shipping and use of ice-breakers in the shoulder seasons, and Inuit raising that they have already experienced significant adverse impacts on narwhal and their harvesting rights.

181. Significantly, the following undermine the reliability of Baffinland's assessment:

- (a) Baffinland downplays the critical importance of the local study area to narwhals, including for mating, calving, nursing and foraging;
- (b) Baffinland has not grappled with, or integrated into its effects assessment, the fact that Inuit are already observing less narwhal and a general decline in the body condition of

¹⁰² See also the recommendation of DFO that Baffinland implement the most conservative mitigation measure and avoid shipping during the shoulder seasons and ice-breaking activities; only ship during the open water season: 2021-01-15 Fisheries and Oceans Canada Updated Written Submission – Baffinland Iron Mines Corporation Mary River “Phase 2 Development” Project Proposal, p. 29 (Filing ID 332524).

¹⁰³ 2021-10-05 BIM Preliminary 2020 Narwhal Monitoring Update, p.3 (Filing ID 336934).

¹⁰⁴ 2021-03-22 MHTO Responses to Questions in Support of NIRB's Assessment of BIM Phase 2 Proposal (Filing ID 334150; 2021-02-04 Northern Contaminants Program 2018-2019 Synopsis of Research Report (Filing ID 332991); 2021-02-04 Northern Contaminants Program 2017-2018 Synopsis of Research Report (Filing ID 332990); NuPPAA, ss. 90 (b), (c), 103(2)

¹⁰⁵ NuPPAA, ss. 103 (e), (f), (g), (i)

narwhal harvested, and experiencing significant adverse impacts on their harvesting rights;

- (c) Baffinland has applied generic thresholds that are not narwhal specific or supported by monitoring data, underestimating the impacts of marine shipping and use of ice-breakers and consequent icebreaking on narwhal;
- (d) Baffinland has not adequately assessed the cumulative impacts on narwhal and their use of Eclipse Sound;
- (e) Baffinland has not monitored or assessed contamination or body condition of narwhal;
- (f) Baffinland's proposed early warning indicators and monitoring protocols are insufficient and will not capture Project effects; and
- (g) Baffinland's proposed mitigation measures remain unproven.

182. Baffinland has not sufficiently developed the Marine Environmental Effects Monitoring Plan or adaptive management plan to provide any comfort that if effects are greater than predicted by Baffinland that they will be captured through effective monitoring and addressed through adaptive management.

183. After years of participation in discussions with Baffinland, and hearings before the Board, MHTO is still in the dark about how Baffinland will detect impacts to harvesting rights, what an acceptable level of impact is according to Baffinland, and what concrete, feasible steps will be taken by Baffinland to reduce the impacts of the Project if those thresholds are reached. It is not sufficient for Baffinland to develop monitoring and adaptive management plans after approval. The Board and MHTO are entitled to know what steps are available to adaptively manage impacts (if any), the effectiveness of those steps, and when those steps will be triggered.

i) Baffinland downplays the critical importance of the local study area to narwhals, including for mating, calving, nursing and foraging

184. Baffinland has not adequately considered the importance of the local study area to narwhals. Baffinland fails to adequately integrate IQ regarding the importance of the local study area for mating, calving, nursing, and foraging by narwhal into its impact assessment and significance determination.

185. Inuit have long known that the local study area provides essential habitat for narwhals, including to mate, calve, nurse, and feed.¹⁰⁶ This has since been corroborated by Baffinland's own monitoring studies, which have not been given full consideration in the assessment.¹⁰⁷

¹⁰⁶ 2019-06-14 Tusaqtavut Study-Pt 1, pp. 3-5 (Filing ID 325450); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1947:21- 1947:24 (Filing ID 333443).

¹⁰⁷ For example, prior to publication of the Phase 2 Addendum, the following publications were available:

186. Baffinland's Marine Mammal Effects Assessment states that "[s]hipping has potential to effect [sic] narwhal distribution as their summer range overlaps with the Northern Shipping Route, and it is thought this summering area is used for calving and mating."¹⁰⁸ Baffinland further refers to it as a "hypothesis" that southern Milne Inlet is an important area for calf rearing.¹⁰⁹ However, it is known that the area is used for mating, calving, nursing, and foraging.

187. As heard at the public hearing:

As they migrate toward Milne Inlet area, some of them continue to calve, give birth, and also continue to give birth at the Milne Inlet channel. That was traditional calving area for narwhal. Right now, they are just dispersed, and yet Phase 2 has not been approved yet.¹¹⁰

188. Inuit hunters have historically observed calving events in Milne Inlet and have reported some harvested narwhal stomachs' being full of prey. In recent years, Inuit have reported observing fewer narwhal and calving events.¹¹¹ Baffinland's assessment does not adequately reflect IQ – it downplays the critical importance of the local study area to narwhal and the observed effects on narwhal.

189. The potential effects of Project activities (notably increased shipping levels and use of ice-breakers) on the critical habitat and life functions of narwhals have not been meaningfully assessed or addressed. For example, Baffinland has failed to consider how a refusal to abandon the local study area due to the critical importance of this habitat may result in increased stress and consequent impacts to narwhal from the Project.

190. A recent study, co-authored by DFO and local Inuit, has shown that cortisol – a stress response hormone and stress indicator in marine mammals – has significantly increased in narwhal since the introduction of the marine shipping for the original project.¹¹² This study evaluated cortisol levels in narwhal blubber sampled during subsistence harvests prior to

Thomas, T.A., S. Raborn, R.E. Elliott and V.D. Moulton. 2016. Marine mammal aerial surveys in Eclipse Sound, Milne Inlet and Pond Inlet, 1 August – 17 September 2015. LGL Draft Report No. FA0059-2. Prepared by LGL Limited, King City, ON for Baffinland Iron Mines Corporation, Oakville, ON. 85 p. + appendices.

Abgrall, P., H. Smith, V. Moulton, and M. Fitzgerald. 2017. Narwhal general distribution, behaviour, and group composition in southern Milne Inlet, Nunavut, Canada. 22nd Biennial Conference on the Biology of Marine Mammals, Halifax, Nova Scotia, Canada. 22-27 October 2017.

Smith, H.R., V.D. Moulton, S. Raborn, P. Abgrall, R.E. Elliott, and M. Fitzgerald. 2017. Shore-based monitoring of narwhals and vessels at Bruce Head, Milne Inlet, 2016. LGL Report No. FA0089-1. Prepared by LGL Limited, King City, Ontario for Baffinland Iron Mines Corporation, Oakville, Ontario. 87 p. + appendices.

¹⁰⁸ 2018-10-03 Baffinland TSD 24 Marine Mammal Effects Assessment, p. 33 (Filing ID 320584) (emphasis added).

¹⁰⁹ 2018-10-03 Baffinland TSD 24 Marine Mammal Effects Assessment, p. 33 (Filing ID 320584).

¹¹⁰ NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2340:15 - 2340:20 (Filing ID 333444) Jayko Allooloo.

¹¹¹ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 49-50 (Filing ID 32543); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2269:10 - 2269:15 (Filing ID 333444); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2340:15 - 2340:20 (Filing ID 333444).

¹¹² 2021-02-04 Watts et al, Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF p. 2 (Filing ID 332989).

project related vessel traffic (2000-2006), during project related vessel traffic (2013-2019), and during a high-stress entrapment event that occurred in 2015.¹¹³

191. The baseline was used to compare against pre-project levels and detect change.¹¹⁴ The study notes that “[v]essel traffic is considered a major stressor for marine mammals and could lead to reduced feeding, communication, and navigation ability that can ultimately lead to reduced fitness”.¹¹⁵ Blubber from “narwhals sampled during the vessel traffic period in the Eclipse Sound region was over 100% higher in cortisol than samples from the pre-project related vessel traffic period”.¹¹⁶

192. Baffinland criticizes this study due to the data availability and posits other potential causes of increased cortisol levels.¹¹⁷ However, Baffinland fails to fundamentally address the fact that this study shows impacts to the narwhal population, which are corroborated by IQ, that Baffinland’s monitoring has failed to detect, and its cumulative impact assessment has not incorporated. Contrary to the written comments of Baffinland, in order to better understand the links to shipping, these impacts need to be monitored to capture not only avoidance, but the health consequences of fidelity to an area that is of critical importance to narwhal.¹¹⁸

193. This study highlights the need for more effective monitoring, consideration of additional indicators, and conducting further assessment to understand the current state of the narwhal population and impacts on narwhal before marine shipping is vastly increased, including shipping during the shoulder season and continued use of ice-breakers in the critical habitat of narwhal.

ii) Baffinland has not addressed, or integrated into its effects assessment, the fact that Inuit are already observing less narwhal and experiencing significant adverse impacts on their harvesting rights

194. Since the increase in marine shipping and icebreaking activity, there has been a decrease in narwhal abundance in the areas relied upon by MHTO members and a negative impact on narwhal body condition. Baffinland has not addressed, or integrated into its effects assessment, the fact that Inuit are already observing less narwhal and skinny narwhal, and experiencing significant adverse impacts on their harvesting rights.¹¹⁹

¹¹³ 2021-02-04 Watts et al, Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF pp. 2, 5 (Filing ID 332989).

¹¹⁴ 2021-02-04 Watts et al, Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF p. 4-5 (Filing ID 332989).

¹¹⁵ 2021-02-04 Watts et al, Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF p. 10 (Filing ID 332989).

¹¹⁶ 2021-02-04 Watts et al, Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF p. 11 (Filing ID 332989).

¹¹⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-69 and CR-5 Attachment 1: Golder Review of Paper on Cortisol Levels in Narwhal, pp. 9-10 and PDF p.218-225 (Filing ID 334147).

¹¹⁸ 2021-10-02 BIM Comments and Resp, para. 112 (Filing ID 336778).

¹¹⁹ 2021-02-05 Resident of Pond Inlet Testimonies Part 3.5 Shipping Impacts on Narwhals (Filing ID 333031); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1910:3 -1910:8 (Filing ID 333443); NIRB

195. The decline in narwhal abundance has made it difficult for MHTO members to hunt the animals due to less availability in known, safe and preferred harvesting areas.¹²⁰

196. Baffinland states that:

Review of multiple lines of evidence consistently indicates that there is variability regarding narwhal abundance and use of the regional study area. Specifically, observations by Inuit and regulators suggest that narwhal use of the area was low in 2018; unfortunately, there was little survey effort in 2018, so there are little to no empirical data to corroborate anecdotal reports of particularly low narwhal abundance. Based on their observations, DFO (2019a) raised concerns about the possibility that noise from icebreaking and shipping activities may have deterred whales from entering Eclipse Sound; however, no data or evidence was provided to substantiate this concern and thus, for the purposes of this review, it is considered an unsubstantiated theory. Rather, it is more likely that a combination of variables, particularly ice cover, was driving anecdotal reports of anomalies in abundance and distribution of narwhal in 2018, and this is supported by literature (see Section 3.1.1.4 above).¹²¹

197. Inuit hunter observations are not merely “anecdotal” and should not be dismissed as such. Inuit have been using the territory for generations. IQ provides evidence of long-term trends in narwhal abundance and distribution, which is not otherwise available for the regional study area. In contrast, Baffinland’s surveys are short-term and only provide a snapshot of the area through flyovers or time limited shoreline monitoring focused on only a small section of the regional study area.

198. Baffinland cannot use its poor survey efforts in 2018 to disregard the impacts on narwhal. The lack of consistent and credible monitoring by Baffinland with respect to abundance of narwhal is an ongoing concern.¹²² IQ is the best available long-term data.

199. Further, as highlighted by DFO, harvest statistics for the summer of 2018 corroborate IQ. Harvest statistics showed only 8 narwhal were hunted in Eclipse Sound in July and August compared to an average of 46 narwhal hunted annually from 2005-2015 in the same timeframe.¹²³ Baffinland has failed to incorporate this decrease in narwhal abundance in the regional study area into its effects assessment and predictions for the Project.

Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1927:21 – 1927:26 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1947:3-1947:11//1947:21-1948:2 (Filing ID 333443); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 49-51 (Filing ID 32543); 2021-02-04 Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF p. 2 (Filing ID 332989); Nunavut Agreement, s. 5.6.1-5.6.3; s. 5.7.16-5.7.18.

¹²⁰ 2019-06-14 Tusaqtavut Study-Pt 4, p. 51 (Filing ID 32543).

¹²¹ 2019-10-15 Hemmera Technical Memorandum to Baffinland entitled “Review of Mary River Phase 2 Assessment Conclusions on the Effects of Icebreaking to Narwhal”, p. 14, in 2019-10-16 Baffinland Part 7 Response to Final Written Comment Responses, PDF pp.50 to 117 (Filing ID 327146).

¹²² 2021-02-02 Department of Fisheries and Oceans Canada, Science Review of Additional Documents Submitted October 8, 2019-January 8, 2020 for the Final Environmental Impact Statement Addendum for the Baffinland Mary River Project Phase 2, pp. 16-17 (Filing ID 332867).

¹²³ 2021-02-02 Department of Fisheries and Oceans Canada, Science Review of Additional Documents Submitted October 8, 2019-January 8, 2020 for the Final Environmental Impact Statement Addendum for the Baffinland Mary River Project Phase 2, pp. 19-20 (Filing ID 332867).

200. Further, Inuit have repeatedly observed seeing skinny narwhal in the regional study area, and narwhal sinking after they are shot with consequent impacts on harvesting rights. Baffinland has not incorporated this evidence of impacts to narwhal body condition in its assessment and dismisses Inuit concerns by stating that it is “more likely a reflection of a change in their environment rather than a result of shipping” from the Project, without having studied the cause or the change in body condition since the introduction of marine shipping.¹²⁴

201. Baffinland states “Baffinland has high confidence in its impact predictions regarding shipping impacts on narwhal because they are founded on multiple lines of evidence including IQ and multiple years of follow-up monitoring”. MHTO disagrees with this statement; it is precisely because Baffinland hasn’t properly listened to, or integrated, IQ that MHTO does not support their confidence findings or significance ratings. Indeed, as acknowledged by Baffinland, IQ reports that there has been “avoidance/displacement behaviour including alteration of migration routes.”¹²⁵

202. Baffinland’s recent monitoring reports for the Project confirm what Inuit have been saying for a number of years – that there has been a significant decline in narwhal abundance in Eclipse Sound – 50% decline since 2019 and 75% decline since 2004.¹²⁶ Baffinland acknowledges that this decline either indicates a decrease in the Eclipse Sound summer stock or displacement to another area.¹²⁷

203. Baffinland has recently indicated (since the resumption of the public hearing in January 2021) that there are three potential causes of this decline in narwhal abundance: Baffinland’s icebreaking operations, increased killer whale presence in the regional study area, and pile-driving activities at the Pond Inlet Small Craft Harbour.¹²⁸ Baffinland goes on to indicate that there is “limited information available to reliably attribute the primary causal factors”.¹²⁹

204. However, the lack of information from Baffinland on causal factors is precisely why MHTO says this Project is not properly supported by assessment data, and further indicates a failure in the monitoring of Baffinland to date. Baffinland’s monitoring should not only monitor the effects, but the factors necessary to understand the Project’s contribution to those effects. It does neither. Baffinland’s monitoring needs to be able to identify Project-related effects, so that mitigations are triggered.

205. Baffinland does not have the data to show that killer whales or other factors are contributing to the recent displacement and decrease in abundance since marine shipping has

¹²⁴ 2021-03-22 BIM Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-18, p. 45 (Filing ID 334147).

¹²⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Baffinland Response to MHTO-18 Attachment 1: List of References, PDF pp. 180, 183 (Filing ID 334147).

¹²⁶ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 1 (Filing ID 334440); 2021-05-17 QIA Ltr Re Preliminary Narwhal Monitoring, p. 1 (Filing ID 335352).

¹²⁷ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 37 (Filing ID 334440).

¹²⁸ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 1 (Filing ID 334440).

¹²⁹ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 2 (Filing ID 334440).

increased. Baffinland acknowledges that “[a] systematic comparison between narwhal and killer whale abundances across years is not possible because reliable abundance estimates for killer whale are not available.”¹³⁰ DFO highlights that “it is also not possible to assess whether current rates of predation pressure on narwhals by killer whales represents an increase or no change relative to historic levels because historic levels are not available.”¹³¹ Nonetheless, the studies and data referred to by DFO show that the presence of killer whale has not been shown to displace narwhal or cause significant trends in abundance.¹³²

206. The precautionary principle dictates that “[w]here there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation”.¹³³ As set out further below, Baffinland’s proposed high level of certainty that the effects are caused by the project is contrary to this principle, and risks that key species relied upon by Inuit, such as narwhal, will be displaced from the territory as Baffinland researches causation – despite Inuit before and after observations about the impacts of shipping on narwhal.

207. Parks Canada suggests that the low number of narwhal that have recently been observed could be the result of the cumulative effect from the overall volume of project shipping, including both open water shipping and icebreaking. Parks Canada suggests additional mitigations beyond the shoulder season (i.e., during peak shipping, during identified narwhal calving, or at assumed peak local narwhal abundance), but Baffinland refuses to consider these effect and mitigations, relying on its limited and inadequate monitoring to assert that open water shipping is not a likely contributor.¹³⁴

208. Narwhal have proven to be sensitive to acoustic disturbance from shipping and exhibit avoidance behaviour.¹³⁵ Baffinland’s continuing assertions that acoustic disturbance from shipping has a temporary, localized and reversible impact is extremely concerning.¹³⁶ Baffinland has no supportable basis to assert that the decline in narwhal is reversible, or to discount the fact that the volume of marine shipping is having an impact on narwhal.

209. What is known is that the current impacts on narwhal are significant at the current level of shipping and use of ice-breakers. A precautionary approach requires that Baffinland address this fact prior to further consideration of the Project by the Board, given its substantial increase in marine shipping and use of ice-breakers. With the current level of shipping and icebreaking

¹³⁰ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 28 (Filing ID 334440).

¹³¹ 2021-05-17 DFO Ltr Re Preliminary Narwhal Monitoring, p. 6 (Filing ID 335350).

¹³² 2021-05-17 DFO Ltr Re Preliminary Narwhal Monitoring, p. 7 (Filing ID 335350).

¹³³ *114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)*, 2001 SCC 40, paras. 31 and 32

¹³⁴ 2021-06-17 Baffinland Response to Comments re: Preliminary Narwhal Monitoring (Filing ID 335788) PDF p. 7

¹³⁵ 2021-11-01 Greenland Institute of Natural Resources Response to Espoo Report, pp.2-3 (Filing ID 337224); 2021-02-05 Resident of Pond Inlet Testimonies Part 3.5 Shipping Impacts on Narwhals (Filing ID 333031); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1910:3 -1910:8 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1927:21 – 1927:26 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1947:3-1947:11//1947:21-1948:2 (Filing ID 333443); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 49-51 (Filing ID 32543); 2021-02-04 Cortisol levels in narwhal (*Monodon monoceros*) blubber from 2000-2019, PDF p. 2 (Filing ID 332989).

¹³⁶ 2021-10-02 BIM Comments and Resp, para. 110 (d)(Filing ID 336935).

having significant impacts, Baffinland has not shown that it can ensure that the impacts of increased shipping and use of ice-breakers and consequent icebreaking will not be significant and can be mitigated.

210. The decrease in narwhal in areas where Inuit have traditionally hunted is devastating for harvesting rights. MHTO is worried that even if members continue to observe significant impacts on narwhal, Baffinland will continue to ignore them as “anecdotal reports”, or blame other factors for the decrease in narwhal in the areas that they have traditionally been found. The disappearance of species from traditional hunting areas has been recognized as a breach of treaty rights.¹³⁷

211. Baffinland’s failure to predict these existing impacts and failure to incorporate them into its significance determination seriously undermines the reliability of its assessment.

iii) Baffinland has applied generic thresholds that are not narwhal specific or supported by monitoring data, underestimating the impacts of marine shipping and use of ice-breakers and consequent icebreaking on narwhal

212. Baffinland’s impact assessment for narwhals relies heavily on acoustic thresholds and modelling to estimate narwhal disturbance and avoidance behaviour in response to marine shipping. These thresholds play a critical role in Baffinland’s determination of whether the Project will have significant effects on, and in their confidence ratings for various impacts to, narwhal.

213. Baffinland continues to use 120 dB re 1 μ Pa root-mean-square (rms) Sound Pressure Level (SPL) and 135 dB SPL rms values as disturbance onset and avoidance criteria. The 120 dB rms value is a generic behavioural response criterion for continuous sound sources (U.S. National Oceanic and Atmospheric Administration, NOAA¹³⁸NMFS 2016¹³⁹), and 135 dB rms criterion was based on bowhead whale response to icebreaking according to Baffinland. The application of this generic criteria to narwhal has not been tested by Baffinland.¹⁴⁰ In its latest comments, Baffinland asserts without authority that these thresholds are conservative, despite the decline of narwhal in Eclipse Sound.¹⁴¹

¹³⁷ *Yahey v. British Columbia*, 2021 BCSC 1287; Nunavut Agreement, s. 5.6.1-5.6.3; s. 5.7.16-5.7.18.

¹³⁸ NOAA, “ESA Section 7 Consultation Tools for Marine Mammals on the West Coast” (April 28, 2021) online: NOAA <<https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/esa-section-7-consultation-tools-marine-mammals-west>>.

¹³⁹ U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Protected Resources, “Effects of oil and gas activities in the Arctic Ocean final environmental impact statement” (2016), Online (pdf): NOAA <https://media.fisheries.noaa.gov/dam-migration/arctic_seismic_feis_oct_2016_final_publication_version_all_volumes_opr1.pdf>.

¹⁴⁰ “So there are no tests specifically on narwhal. There has been testing done on beluga, which would be the most similar representative species. //” So we estimate what we think narwhal hearing thresholds are, based on these other animals.” NIRB Public Hearing Transcripts for January 29, 2021, Vol. 5, pp. 998:2 - 998:9 // 998:13 - 998:14 (Filing ID 333449) Baffinland, Melanie Austin.

¹⁴¹ 2021-10-02 BIM Comments and Resp, para. 56 (Filing ID 336935).

214. IQ tells us that narwhal are particularly sound sensitive.¹⁴² A conservative approach to estimating impacts would take this sound sensitivity into account. Further, Oceans North has presented research that shows that received sound levels associated with behavioural disturbance and avoidance for Eclipse Sound narwhal are lower than those predicted by Baffinland, resulting in Baffinland underestimating effects.¹⁴³

215. Baffinland acknowledges that “it is possible that narwhal could exhibit some behavioural response at levels below 120 dB re 1 μ Pa.” However, Baffinland goes on to state “these responses are expected to be rare and, when they occur, they would be of low-level severity.”¹⁴⁴ Baffinland relies on limited monitoring and the limited tagging of narwhal to support its reliance on the threshold of 120 dB – drawing broad conclusions about severity despite this limited effort.

216. Further, the threshold of 135 dB rms for avoidance behaviour used for the effects of icebreaking has been criticized as having no support in the literature.¹⁴⁵ Baffinland provides no meaningful justification for using this threshold for assessing impacts from underwater noise during icebreaking.

217. In the public hearing, DFO distinguished between the thresholds used for short term and temporary disturbance, and the thresholds used to determine a species-specific response from a chronic source of noise. DFO stated that the issue of thresholds used to determine a species-specific response from a chronic source of noise remains a “data gap that needs to be addressed”.¹⁴⁶

218. IQ and the recent monitoring reports of Baffinland show that narwhal are in fact exhibiting avoidance behaviour at thresholds lower than anticipated, resulting in displacement from Eclipse Sound. This observed displacement warrants a reconsideration of the acoustic thresholds used and a reconsideration of the significance of the impacts of the Project to narwhal. Despite these observed impacts, Baffinland inexplicably continues to assert that the available data for impacts to narwhal continues to support its predictions – Baffinland did not predict narwhal decline and avoidance.¹⁴⁷

¹⁴² 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.5: Marine Impacts – Shipping Disturbance on Narwhals), Mathias Kaunak at 1:43-1:56 (Filing ID 333031); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 49-51 (Filing ID 32543).

¹⁴³ 2021-01-18 Underwater soundscape and radiated noise from ships in Eclipse Sound, NE Canadian Arctic, pp.11, 71 (Filing ID 332599); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 2122:18 – 2122:23 (Filing ID 333443).

¹⁴⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to ON-4, PDF p. 79 (Filing ID 334147).

¹⁴⁵ 2021-02-02 Department of Fisheries and Oceans Canada, Science Review of Additional Documents Submitted October 8, 2019-January 8, 2020 for the Final Environmental Impact Statement Addendum for the Baffinland Mary River Project Phase 2, pp. 19-20 (Filing ID 332867); 2019-10-15 Hemmera Technical Memorandum to Baffinland entitled “Review of Mary River Phase 2 Assessment Conclusions on the Effects of Icebreaking to Narwhal”, p. 19, in 2019-10-16 Baffinland Part 7 Response to Final Written Comment Responses, PDF pp.50 to 117 (Filing ID 327146).

¹⁴⁶ NIRB Public Hearing Transcripts for November 1, 2021, Vol. 16, p. 3095:09-3098:06 (Filing ID 337420).

¹⁴⁷ 2021-10-02 BIM Comments and Resp, para. 59 (Filing ID 336935).

219. Baffinland's thresholds are not supported by the monitoring data, and should not be relied upon to predict the impacts of the Project to narwhal. MHTO recommends that narwhal specific thresholds for acoustic disturbance and avoidance are developed in consultation with MHTO or, at the very least, sufficiently precautionary thresholds are used to estimate the impacts of the Project that are based on narwhal's observed responses to shipping and icebreaking prior to a recommendation.

iv) Baffinland has not adequately considered the cumulative impacts on narwhal in relation to their use of Eclipse Sound

220. Baffinland's impact assessment also falls short in that there is no meaningful assessment of multiple, repeated vessel passages on narwhal in combination with cumulative regional disturbance in the impact assessment.¹⁴⁸

221. The impact assessment focuses on estimated impacts from a single ship transit when in reality there are very few (if any instances) where just a single Project vessel will be present in Eclipse Sound. The impact assessment does not address the fact that narwhal will be repeatedly exposed to ship transits over the shipping season – up to 9 transits per day according to Baffinland (it is unclear whether this number includes tugs and icebreaker transits) – in conjunction with existing disturbance within and outside the Project area.¹⁴⁹ This is a significant gap that undermines the reliability of Baffinland's impact predictions for narwhal.

222. Baffinland continues to deny and downplay the need for the Board to consider the cumulative impact of repeated ship transits on narwhal. For example, in response to a question from the Board about the questions that DFO and others have raised about the level of confidence in Baffinland's impact predictions of the effects of multiple ship transits on narwhal, Baffinland emphasizes the number of hours per day that narwhal will experience noise below its disturbance thresholds.¹⁵⁰

223. However, using Baffinland's own evidence, narwhal would experience a "7 to 36 min disturbance period per vessel transit".¹⁵¹ This would mean that narwhal could potentially experience up to 5 hr 40 mins in a disturbed state per day. From this simple calculation, the need to address the cumulative impact of these repeated exposures in combinations with other disturbance in the region is evident. This calculation does not include all vessel traffic and disturbance (e.g. cruise ships, community resupply, pile-driving).¹⁵²

¹⁴⁸ Nunavut Agreement, Article 12, s. 12.5.5; NuPAA, ss. 103(1)(f), (i), 103(2), 90(i).

¹⁴⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-71, p. 12 (Filing ID 334147).

¹⁵⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-71, p. 12 (Filing ID 334147).

¹⁵¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-71, p. 12 (Filing ID 334147).

¹⁵² "Also, there is remaining uncertainty about the duration of these and several other behavioural effects due to limitations in the experimental design of the monitoring programs. Currently, reporting by the proponent does not look at differences in behavioural responses between different types of ships. The types of ships other than ore carriers make up approximately a third of project shipping, and these types emit more sound into the water than the

224. DFO is of the view that “there still remains concern that noise disturbance has not been appropriately monitored, and that noise disturbance associated with increased Phase 2 shipping activities has not been adequately characterized”. DFO “does not agree with Baffinland’s assessment that effects to marine mammals due to noise will be ‘not significant’” and is of the view that there is “still a high degree of uncertainty that exists in the assessment.”¹⁵³

225. Baffinland has not provided sufficient support to suggest potential noise effects are fully reversible or that narwhal will tolerate or habituate to increased noise. Baffinland admits that its narwhal tagging efforts and shore-based monitoring have not indicated habituation.¹⁵⁴

226. In response to the Board, Baffinland notes that “[w]e would not expect to see any measurable energetic consequences from repeated, or cumulative, sound exposures”.¹⁵⁵ Baffinland relies on data from tagged narwhal to conclude that narwhal response to Project vessels appear to be localized, small-scale changes in behaviour. However, as highlighted by DFO, two narwhals equipped with satellite tags “cannot be used to generalize to the entire Eclipse Sound stock” and sample of sizes of more than 100 individuals are needed to assess impacts of disturbance on animal movement.¹⁵⁶

227. In response to the comments on the recent narwhal monitoring data, Baffinland agrees that “data from two tagged animals are insufficient to understand overall narwhal behavioural responses to a transiting icebreaker during ice-covered periods.”¹⁵⁷ Baffinland also reported a “noticeable shift [after the icebreaker transit] in narwhal distribution from 21 to 22 July 2020 where narwhal appeared to move from the 4-6/10 ice area in north Milne to the 9-10/10 ice in Eclipse Sound”, which points to vessel avoidance.¹⁵⁸

228. Further, the evidence discussed above is that in 2018 and 2020 narwhal numbers in Eclipse Sound appeared to be at record lows.¹⁵⁹ As recognized by DFO, “2018 was a year when

ore carriers. Therefore, distances to behavioural disturbance or avoidance should be carefully examined as they may be larger than currently determined.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 2119:14 - 2119:26 (Filing ID 33343) Josh Jones (Ocean North)- video.

¹⁵³ 2021-01-15 Fisheries and Oceans Canada Updated Written Submission – Baffinland Iron Mines Corporation Mary River “Phase 2 Development” Project Proposal, p. 20 (Filing ID 332524).

¹⁵⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to ON-1, PDF p. 78 (Filing ID 334147).

¹⁵⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-71, p. 12 (Filing ID 334147).

¹⁵⁶ 2021-02-02 Department of Fisheries and Oceans Canada, Science Review of Additional Documents Submitted October 8, 2019-January 8, 2020 for the Final Environmental Impact Statement Addendum for the Baffinland Mary River Project Phase 2, p.18 (Filing ID 332867).

¹⁵⁷ 2021-06-17 Baffinland Response to Comments re: Preliminary Narwhal Monitoring, PDF p. 20 (Filing ID 335788).

¹⁵⁸ 2021-04-08 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs, p. 15 (Filing ID 334440).

¹⁵⁹ 2019-10-15 Hemmera Technical Memorandum to Baffinland entitled “Review of Mary River Phase 2 Assessment Conclusions on the Effects of Icebreaking to Narwhal”, p. 8, in 2019-10-16 Baffinland Part 7 Response to Final Written Comment Responses, PDF pp.50 to 117 (Filing ID 327146).

narwhal numbers were low, indicating that most Eclipse Sound narwhals spent their summer in a different summering location than Eclipse Sound.”¹⁶⁰ This behaviour is continuing in 2020.¹⁶¹

229. This observed avoidance of the area is contrary to Baffinland’s statement that “[t]he behavioural response data collected to date does not demonstrate any evidence of this type of response (i.e., avoidance behaviour that extends beyond the acoustic exposure event).”¹⁶² The statement further highlights Baffinland’s knowledge gaps with respect to the factors that are impacting narwhal.

230. Under Conditions 110, 111 and 112 of the existing project certificate, Baffinland was required to study the cumulative effects of vessel noise. Baffinland has failed to do so. Baffinland notes that its cumulative effects monitoring is focused on studying the “additive effects” of anthropogenic activities on marine mammal populations.¹⁶³ However, in order to understand the additive effects, Baffinland must have an understanding of the existing baseline effects, and methods for determining the causal factors for effects. For the expanded Project, this includes the effects of Baffinland’s existing operations. Baffinland admits there are unknown and/or unmitigated cumulative activities occurring in the Marine RSA.¹⁶⁴ Baffinland did not predict the narwhal decline and has not explained how marine shipping can be vastly increased without the impacts on narwhal abundance in the areas relied upon by Inuit happening each year.

231. Baffinland complains that “[i]t is unreasonable to assume that Baffinland is responsible for monitoring and detection of all external non-Project stressors, particularly when details on these stressors are poorly understood”.¹⁶⁵ However, that is exactly what Baffinland is obligated to do for the Project assessment. Baffinland was required to put baseline data before the Board on the current level of combined and cumulative effects on narwhal and assess how the addition of the increase in shipping of the Project and icebreaking would impact narwhal. Without sufficient and accurate baseline data on current stressors and their impacts, Baffinland’s impact predictions cannot be relied upon.

232. Further, where Baffinland is relying on other non-Project stressors as potential causal factors for impacts to narwhal, Baffinland must do the work to understand those factors, and not merely assert that they could be a causal factor. Baffinland has an ongoing responsibility to monitor cumulative impacts on the Eclipse Sounds narwhal stock. Yet, Baffinland does not see

¹⁶⁰ 2021-02-02 Department of Fisheries and Oceans Canada, Science Review of Additional Documents Submitted October 8, 2019-January 8, 2020 for the Final Environmental Impact Statement Addendum for the Baffinland Mary River Project Phase 2, p. 18 (Filing ID 332867).

¹⁶¹ 2021-09-13 Baffinland Preliminary 202 Narwhal Monitoring Update, p.10 (Filing ID 336783).

¹⁶² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-70, p. 11 (Filing ID 334147).

¹⁶³ 2021-09-13 Baffinland Preliminary 202 Narwhal Monitoring Update, p.10 (Filing ID 336783).

¹⁶⁴ 2021-09-13 Baffinland Preliminary 202 Narwhal Monitoring Update, p.11 (Filing ID 336783).

¹⁶⁵ 2021-06-17 Baffinland Response to Comments re: Preliminary Narwhal Monitoring, PDF p. 13 (Filing ID 335788).

it as its responsibility to monitor these impacts and instead defers responsibility to the governments to undertake this monitoring.¹⁶⁶

233. As noted by DFO, Baffinland has “a responsibility to determine and monitor combined and cumulative impacts within the impacted Project Area”. An “analysis of the combined and cumulative effects of these factors should be undertaken by Baffinland, including the potential accumulation of project-related impacts on narwhal since project-related shipping began in 2015.”¹⁶⁷ This updated analysis of the cumulative impacts currently faced by narwhal is necessary to understand the state of the narwhal population prior to significantly expanding shipping from 122 to 392 vessel transits.

234. This is a significant gap in Baffinland’s assessment that cannot be put off until after Project approval. The Board remains without essential, up-to-date information about what the cumulative impact of the vast increase in marine shipping and use of ice-breakers will do to critical narwhal populations in combination with existing impacts. Without this evidence, the Board cannot be confident that the significant adverse impacts on narwhal and Inuit harvesting rights can be prevented, mitigated or managed.

v) Baffinland has not monitored or assessed contamination of narwhal

235. Narwhal is vitally important to the diet of Inuit in Pond Inlet. MHTO has put forward evidence that certain contaminants in narwhal have increased since the 1970s.¹⁶⁸

236. Elders and hunters from Pond Inlet have raised concerns about the red dust releases from the existing project operations. As set out in the ArctiConnexion Report:

This dust can carry trace metals and impact the marine ecosystem of Milne Inlet (Qinnguut), the main feeding and breeding ground of the narwhals. Elsewhere in South America, a life-cycle assessment of an iron mine has revealed the emission of chrome, zinc, and lead in the air as well as the release of cadmium, arsenic, nickel, copper in the water with important ecotoxic impacts on the ecosystem and carcinogenic impacts on people.¹⁶⁹

237. Despite the contribution of narwhal to the traditional diet of Inuit, the contamination of narwhal has received no attention with respect to monitoring or assessment. Baffinland has not undertaken sampling to understand whether its operations are affecting, or will affect, narwhal health, with no baseline data on contaminants being collected prior to operations commencing or during operations. This is a gap in Baffinland’s assessment.

vi) Baffinland’s proposed early warning indicators and monitoring protocols are insufficient and will not capture Project effects

¹⁶⁶ 2021-06-17 Baffinland Response to Comments re: Preliminary Narwhal Monitoring, PDF p. 13 (Filing ID 335788).

¹⁶⁷ 2021-05-17 DFO Ltr Re Preliminary Narwhal Monitoring, p. 2 (Filing ID 335350).

¹⁶⁸ 2021-02-04 ArctiConnexion: Trace metals and persistent organic pollutants concentrations in narwhals from the eclipse sound (January 2021), PDF pp. 2-3 (Filing ID 332993).

¹⁶⁹ 2021-02-04 ArctiConnexion: Trace metals and persistent organic pollutants concentrations in narwhals from the eclipse sound (January 2021), PDF pp. 7-8 (Filing ID 332993).

238. Baffinland was required pursuant to Terms and Conditions 110, 111, and 112 of the existing project certificate to develop EWIs, thresholds and monitoring protocols to mitigate impacts of ship noise on marine mammals in consultation with the MEWG. The goal of this monitoring effort was “to ensure the rapid identification of negative impacts due to Project shipping activities.”¹⁷⁰

239. Baffinland has failed to develop EWIs, thresholds and monitoring protocols in consultation with MEWG. Despite having been shipping for 7 years and using ice-breakers for 3.5 years, Baffinland has only within the last year, adopted one EWI – the proportion of immature narwhal. MHTO and other intervenors have expressed serious concerns that this indicator is inappropriate and that only one EWI is insufficient to actually detect early warning signs that adverse impacts to narwhal are occurring.¹⁷¹

240. Currently, Baffinland reports that “the proportion of immatures in the narwhal population have not changed since Project shipping began”.¹⁷² However, MHTO members have observed less calving, less nursing, less socializing behaviour, as well as impacts to narwhal abundance and body condition, since marine shipping and use of ice-breakers began, raising questions about the sufficiency of this lone indicator.

241. DFO has recommended additional monitoring of narwhal body condition and stress levels as early warning indicators.¹⁷³ However, these indicators require a current level of understanding of the baseline blubber levels and stress levels in narwhal to detect change caused by the increased marine shipping for the Project. Baffinland has not collected this data.

242. The Board directly asked Baffinland about this data gap and the indicators recommended by DFO, but in response Baffinland does not commit to implementing these early warning indicators and gathering sufficient data. Rather, Baffinland merely notes that it will “[c]ontinue to work with DFO to improve monitoring for existing and additional EWIs for the marine mammal monitoring”.¹⁷⁴ Deferring responsibility for adequate monitoring for the Project, Baffinland advocates for “a regional approach towards health and body condition monitoring to be led by the Department of Fisheries and Oceans”.¹⁷⁵

243. For 2021, Baffinland has committed to monitor body condition from a distance. However, Baffinland has not collected the baseline data to detect change overtime. Further, MHTO has serious concerns about the manner in which Baffinland intends to monitor body

¹⁷⁰ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 39 (Filing ID 332232).

¹⁷¹ 2021-01-15 Fisheries and Oceans Canada Updated Written Submission – Baffinland Iron Mines Corporation Mary River “Phase 2 Development” Project Proposal, pp. 28-29, 32 (Filing ID 332524).

¹⁷² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-20, p. 48 (Filing ID 334147).

¹⁷³ 2021-01-15 Fisheries and Oceans Canada Updated Written Submission – Baffinland Iron Mines Corporation Mary River “Phase 2 Development” Project Proposal, pp. 4, 28-29, 32 (Filing ID 332524).

¹⁷⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-72, p. 12 (Filing ID 334147).

¹⁷⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to CR-5, p. 65 (Filing ID 334147).

condition from a distance, and questions whether changes will be able to be accurately captured.

244. MHTO remains critically concerned that Baffinland will continue to downplay the effects of the Project on narwhal – blaming other factors – and does not have sufficient baseline data or monitoring protocols to detect change. We see this already with Baffinland criticizing the study on increased cortisol levels on the basis that there is not sufficient data over time, despite Baffinland not making any effort to monitor cortisol levels since shipping began.¹⁷⁶

245. Further, despite a significant decline in narwhal abundance in Eclipse Sound, Baffinland indicates in its latest monitoring report that “[r]esults from the 2020 behavioural and group composition study components are consistent with existing impact predictions in the FEIS in that ship noise effects on narwhal will be limited to temporary, localized avoidance behaviour”.¹⁷⁷ DFO questions whether displacement out of the regional study area would still qualify as “temporary, localized avoidance behaviour” and highlights that “temporary, localized avoidance behaviour” may still qualify as a significant impact if the disturbance is recurrent.¹⁷⁸ Displacement out of the regional study area is certainly a significant impact to MHTO members that rely on this area for harvesting.

246. Along with developing adequate early warning indicators, sufficient baseline data on the narwhal population needs to be collected prior to a recommendation on the Project. There needs to be an understanding of the cumulative factors impacting narwhal and monitoring of those factors so that impacts from the Project can be identified. This has not occurred to date (as is evidence by the lack of knowledge about killer whale numbers). The failure of Baffinland to take these foundational steps adds considerable uncertainty to the review and the Project should not be recommended for approval without this key information.¹⁷⁹

vii) Baffinland’s proposed mitigation measures remain unproven

¹⁷⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: CR-5 Attachment 1: Golder Review of Paper on Cortisol Levels in Narwhal, PDF p.218-225 (Filing ID 334147).

¹⁷⁷ 2021-04-08 Golder Technical Memo Preliminary Summary of 2020 Narwhal Monitoring Programs, p.7 (Filing ID 334440).

¹⁷⁸ 2021-05-18 DFO Letter re Preliminary Summary of 2020 Narwhal Monitoring Programs, p.4 (Filing ID 335350).

¹⁷⁹ “The Phase 2 addendum includes no assessment of the behavioural effects on narwhal from multiple repeated daily vessel transits, and I’m not talking here about having modelled the effects of more than one vessel on a single day but about evaluating the cumulative effects of multiple vessels day after day, week after week, month after month, and this in an area that is known by Inuit to be important for narwhal calving, foraging, and mating like Eric just explained. In fact, our review of the Phase 2 assessment could not find an adequate evaluation of how the project would impact these very critical life functions and how Inuit harvesting of narwhals may be affected as a result. And, finally, we know from various recent scientific studies that narwhals are considered one of the Arctic species most vulnerable to environmental change given that the Arctic is warming up at nearly three times the rest of the planet with profound impacts on Arctic wildlife. It is surprising that the Phase 2 addendum did not adequately consider the cumulative impacts of the environmental pressures imposed by climate change added to the effects of the project on marine mammal populations and, therefore, on Inuit communities.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1951:18 - 1952:15 (Filing ID 333443) Valerie Vergara, MHTO.

247. The efficacy of Baffinland's response measures remain unproven, and there is uncertainty in the ability of current monitoring programs to detect impacts.¹⁸⁰

248. Further, no information has been provided in terms of what will be required to trigger a response, and the degree of certainty that Baffinland will require to show the Project is causing the impact before mitigation measures aimed at lessening or avoiding the impact will be implemented.

249. In response to a question from the Board about how Baffinland will separate out the impacts of acoustic disturbance from other stressors (changes in ocean temperature etc.), Baffinland notes that it will monitor "narwhal vocal behaviour when there are no ships around to periods when ships are around".¹⁸¹ However, this does not account for the full spectrum of impacts from acoustic disturbance. For example, narwhal could continue with vocal behaviour, but still be stressed and have heightened cortisol levels from the shipping disturbance, or demonstrate displacement and avoidance.

250. In response to a question from QIA about how it will tease apart the effects of shipping on the proportion of immature narwhal from other potential explanatory factors, Baffinland says it will look to the "behavioural responses of narwhal to shipping" in that "[i]f observed behavioural impacts are shown to be negligible while narwhal reproductive output has changed, it is reasonable to assume that the cause of the change is likely driven by an external factor".¹⁸² It is unclear what Baffinland considers to be a "negligible" behavioural impact.

251. MHTO does not agree that it would be reasonable to assume that the cause is an external factor. For example, narwhal could experience increased stress levels due to an unwillingness to abandon an area, with potential fitness consequences from marine shipping.¹⁸³

252. As stated by DFO "[i]ndividuals may not always leave an area even if a negative impact is occurring during important life history functions."¹⁸⁴ This would mean that behavioural responses may not be observable, but the increased stress of shipping is still having an impact.¹⁸⁵

253. In response to MHTO, Baffinland states that the reduction of 10% of the immature individuals in the population "would need to be met alongside corresponding moderate level

¹⁸⁰ NuPPAA, s. 103(1)(h), (i)

¹⁸¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-13, p. 9 (Filing ID 334147).

¹⁸² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-3, p. 18 (Filing ID 334147).

¹⁸³ 2019-10-15 Hemmera Technical Memorandum to Baffinland entitled "Review of Mary River Phase 2 Assessment Conclusions on the Effects of Icebreaking to Narwhal", p. 12, in 2019-10-16 Baffinland Part 7 Response to Final Written Comment Responses, PDF pp.50 to 117 (Filing ID 327146).

¹⁸⁴ 2021-02-02 Department of Fisheries and Oceans Science Review of Additional documents Submitted June 18 – August 29, 2019 for the Final Environmental Impact Statement Addendum for the Baffinland Mary River Project Phase 2, p. 19 (Filing ID 332866).

¹⁸⁵ 2019-10-15 Hemmera Technical Memorandum to Baffinland entitled "Review of Mary River Phase 2 Assessment Conclusions on the Effects of Icebreaking to Narwhal", p. 10, in 2019-10-16 Baffinland Part 7 Response to Final Written Comment Responses, PDF pp.50 to 117 (Filing ID 327146).

behavioural responses to be able to effectively correlate this change to Project-related impacts” and trigger a moderate response.¹⁸⁶

254. The examples of moderate level responses include: prolonged change in dive behaviour (surface time, bottom dive, dive duration), prolonged change in surface behaviour, prolonged modification or cessation of vocal behaviour.¹⁸⁷ It is unclear what “prolonged” means to Baffinland.

255. A note in Baffinland’s Marine Mammal Trigger Action Response Plan, further qualifies that for the threshold to be met “responses in movement behaviour would need to be observed as a trend in the movement data across individuals”.¹⁸⁸ However, Baffinland does not indicate what proportion of the population would need to exhibit this trend in movement in order to trigger a response, how long this trend would need to be observed for, or what monitoring programs are available to sufficiently capture this trend.

256. Even when a moderate level response is triggered, as an initial step, Baffinland only plans on investigating trends over time and undertaking studies to confirm “the effects are linked to the project”.¹⁸⁹ Based on the outcome of the studies, a moderate-action response may be implemented. This means that there could be considerable delay between when an effect is detected and the implementation of any response. Using this approach, it is unclear how Baffinland could properly utilize EWIs to inform and trigger its implementation of adaptive management.

257. For a high level action response, a reduction of 25% of the immature individuals in the population and/or 25.0% decrease in stock size relative to 2019 aerial survey abundance would need to be met alongside high severity behaviour responses, including “severe and or sustained (long-term) avoidance of disturbance zone area” and “outright panic, obvious flight or freeze response, stampede, or stranding events that can be directly linked to shipping”.¹⁹⁰

258. Baffinland does not sufficiently explain what it would determine to be a “severe and or sustained (long-term) avoidance”. Even with the significant decrease in narwhal abundance that has been observed in Eclipse Sound over a number of years, Baffinland only states that a high-risk threshold has “potentially” been triggered.¹⁹¹

¹⁸⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-20, p. 48 (Filing ID 334147).

¹⁸⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 280 (Filing ID 334147).

¹⁸⁸ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 280 (Filing ID 334147).

¹⁸⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 280 (Filing ID 334147).

¹⁹⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 280 (Filing ID 334147).

¹⁹¹ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 38 (Filing ID 334440).

259. A high level action response is only proposed to be implemented if “causal effect or likely relationship is determined”.¹⁹² As discussed further below in the section entitled “Level of Certainty Required and Working Group Decision-making”, Baffinland proposes to require a “higher degree of certainty that the Project is reasonably associated with the effect and that the High Action Level response has a reasonable likelihood of reversing the effect” to implement high level action responses.¹⁹³ This high degree of certainty is not appropriate, given the lack of consistent monitoring of disturbance factors for narwhal and the importance of narwhal to Inuit.

260. Further, the feasibility and effectiveness of response measures have not been proven. With respect to the recent decrease in narwhal abundance, the Golder memorandum to Baffinland recommends “identification and implementation of precautionary Project-based operational mitigations for shoulder season shipping in light of unknown and/or unmitigated cumulative activities continuing to occur in 2021”.¹⁹⁴ MHTO disagrees that these so-called “operational mitigations” are sufficient given the significant impacts observed; BIM should cease all shipping and use of ice breakers in shoulder seasons at both the opening and close of the shipping season.

261. DFO questions whether the proposed options for responses are based on biological rationale for narwhal. DFO is “concerned that there is insufficient biological data to comprehensively inform and review each option.”¹⁹⁵ Baffinland does not provide sufficient information to understand, and it is not known, whether these proposed options would be effective at reducing icebreaking impacts on narwhal.

262. Parks Canada noted that they would like to see “more robust” mitigation options from Baffinland than those already committed to.¹⁹⁶ MHTO advocated for Baffinland to stop icebreaking.

263. DFO recommended that Baffinland review the options with the MEWG. However, as detailed further below, those discussions were not satisfactory. At the end of the teleconference, parties were unaware of which mitigation option was expected to be implemented and expressed concerns around this process. Baffinland did not indicate how information would be brought to the MEWG at the end of the monitoring year to assess if the mitigation option was effective or not, or if other options were available.¹⁹⁷

264. Baffinland has since indicated that they will cease icebreaking for the opening of the 2021 season, but will resume icebreaking in the Fall of the 2021 season. While the temporary stopping of icebreaking is a welcome change, it is a band aid fix for a serious problem with respect to the impacts of marine shipping on narwhal at the current levels of shipping.

¹⁹² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 280 (Filing ID 334147).

¹⁹³ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 2(1) Adaptive Management Plan (Revised Draft), ss. 2.2.3 at p. 52 (Filing ID 332869).

¹⁹⁴ 2021-04-07 BIM Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs-IMTM, PDF p. 1 (Filing ID 334440).

¹⁹⁵ 2021-05-17 DFO Ltr Re Preliminary Narwhal Monitoring, p. 8 (Filing ID 335350).

¹⁹⁶ 2021-05-18 PC Ltr Re Preliminary Narwhal Monitoring, PDF p.3 (Filing ID 335353).

¹⁹⁷ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 37 (Filing ID 337185).

Baffinland has not indicated how it will be able to vastly increase shipping from 122 to 392 transits and manage impacts to narwhal. Baffinland certainly can no longer maintain that impacts to narwhal will not be significant.

265. Baffinland has not collected sufficient data to demonstrate the effectiveness of proposed mitigations. Baffinland has not shown that its plans will prevent, mitigate and adaptively manage impacts to narwhal.

viii) Conclusion

266. Baffinland has not accurately captured the impacts of the Project to narwhal in its assessment. Many gaps and inconsistencies in Baffinland's assessment remain that result in an underestimation of impacts to narwhal and narwhal harvesting. Notably, Baffinland has failed to incorporate the narwhal decline in Eclipse Sound that has been observed since 2018 by Inuit into its impact predictions.

267. Based on the experience of Inuit, and the information submitted to the Board through intervenors, the vast expansion of marine shipping will have significant adverse impacts on narwhal and narwhal harvesting. At this stage, Baffinland has not shown that it would be able to prevent, mitigate and manage the significant adverse impacts to narwhal and narwhal harvesting (properly characterized) to support a recommendation of Project approval.

268. Prior to consideration of the expansion, in order to protect the ecosystemic integrity of the region, it is recommended that the gaps in the assessment identified above are filled and that mitigation measures are developed and implemented for the existing project impacts. The narwhal population should then be monitored to determine whether the measures are effective at mitigating the observed decline/avoidance of narwhal in Eclipse Sound.

269. This unique situation warrants precaution on the part of the Board, so that Inuit do not lose access to this vital species. To authorize a vast increase in marine shipping at this time, when it is not known whether Baffinland can mitigate the current impacts of marine shipping to narwhal and narwhal harvesting to a sufficient degree to see a return of narwhal to the area, is premature and not consistent with the objectives of the Nunavut Agreement or NuPPAA, or in the regional or national interest.

4. Impacts of the Project on Seal and Seal Harvesting

270. MHTO members have relied on the harvest of seal for generations. Seal are depended upon to survive and are a key part of the diet of Inuit.¹⁹⁸

271. Sealskin is further a valued animal hide for making traditional clothing in the community, and is an essential resource used to provide the warmth and durability required by Inuit while travelling, hunting, and engaging in other traditional activities.¹⁹⁹

¹⁹⁸ 2021-01-18 MHTO Supplemental Final Written Submissions to NIRB for Baffinland's Phase 2 Proposal, p. i (Filing ID 332619); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 38-48, 49-50 (Filing ID 32543).

¹⁹⁹ 2019-06-14 Tusaqtavut Study-Pt 4, p. 47 (Filing ID 32543); NuPPAA, ss. 90 (b), (c), 103(2).

272. The Project area and transportation corridor for the shipping and icebreaking for the Project are highly valued seal habitat and harvesting areas for seals.²⁰⁰ DFO mapping submitted for the hearing corroborates member knowledge of seal habitat along the shipping and icebreaking route.²⁰¹

273. Similar to impacts related to narwhal, Inuit are experiencing significant impacts on seal harvesting at the current shipping levels, but Baffinland has not integrated this knowledge into its effects predictions or significance determinations.²⁰² The failure to monitor and consider these existing impacts significantly undermines the reliability of Baffinland's impact assessment.²⁰³

274. Prior to consideration of a recommendation on the Project, MHTO recommends that Baffinland be required to undertake an assessment of the cumulative impacts to seal and seal harvesting, conduct additional and substantive consultation to gather IQ, and update its significance determination for the Project. Based on this updated assessment, measures to mitigate impacts to seal and seal harvesting should then be developed in advance of Project approval.²⁰⁴

275. On the information before the Board, Baffinland has not shown that it could prevent, mitigate and manage the significant adverse impacts to seal and seal harvesting from the Project.

i) Baffinland has not grappled with, or integrated into its effects assessment, the fact that Inuit are already observing less seal and experiencing significant adverse impacts on their harvesting rights

276. Inuit "before-after" observations show that the ringed seal population has decreased in Eclipse Sound and especially in Milne Inlet since the increase in shipping. Inuit are reporting that they have to travel further to hunt seals and that there are an increased number of seals that are being caught that are abnormal or sick, and that they do not want to eat for fear of contamination.²⁰⁵

²⁰⁰ 2019-06-14 Tusaqtavut Study-Pt 3, pp. 32-33, 38, 40 (Filing ID 325452).

²⁰¹ 2021-01-18 Department of Fisheries and Oceans Canada, Pinniped (seals and walrus) research in Pond Inlet, Eclipse Sounds, Tremblay Sound and Milne Inlet (Filing ID 332596); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.3: Marine Impacts - Shipping Disturbance on Seal), (Filing ID 333029); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1913:1 – 1913:19 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1956:18 – 1956:21 (Filing ID 333443).

²⁰² Baffinland hasn't monitored seal population important to Inuit harvesting and has no information about seal harvesting. Baffinland didn't consider impacts on seal harvesting, and that points to a larger gap in their incorporation of what Inuit have been telling them for years. "If Baffinland had heard and acknowledged our input, wouldn't they have had information on seal and harvesting of seal?" NIRB Public Hearing Transcripts for February 5, 2021, Vol. 1, pp. 1947:3 - 1947:19 (Filing ID 333445) Eric Ootoovak, MHTO.

²⁰³ NuPPAA, ss. 103 (e), (f), (g), (i).

²⁰⁴ NuPAA, ss. 103(1)(f), (i), 103(2), 90(i).

²⁰⁵ 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.3: Marine Impacts - Shipping Disturbance on Seal),

277. Inuit have been hunting seal in the area for generations and continue to do so. Baffinland has not provided justification for why it has not incorporated member observations that the seal have decreased in Eclipse Sound and especially in Milne Inlet since the increase in shipping into its effects assessment.²⁰⁶

278. Instead, Baffinland has relied on its ship-based observer program to support its conclusion that shipping and use of ice-breakers will not have a significant effect on seal. This program is limited in terms of its effectiveness, frequency and duration, and only provides a snapshot of the area for a very limited time period. It is not sufficient to determine the abundance and distribution of seal in the local study area as compared to pre-project levels.

279. Baffinland only plans to undertake seal aerial surveys to document “seal density and distribution in the RSA” in 2021.²⁰⁷ Baffinland further has not monitored for the impacts to seal health, including from the dust from the Project. At the public hearing, MHTO provided photographs of seal breathing holes that were covered in dust. Baffinland characterizes this as a “worst-case” scenario, but the fact remains that Baffinland has not done follow-up monitoring on seal health.²⁰⁸

280. Baffinland acknowledges that it has not prioritized follow-up monitoring for ringed seal in the last years that it has undertaken shoulder season icebreaking to verify whether its effects predictions for the original project were correct.²⁰⁹ Baffinland is relying on the same unproven assumptions for the original project, without doing the work to verify its predictions are accurate.²¹⁰ This is in the face of IQ that is contrary to these predictions and reports that seal abundance in the area has been negatively impacted, with significant impacts to harvesting.

281. In Baffinland’s latest response to MHTO, Baffinland “acknowledges recent feedback from hunters indicating they are observing local changes in seal abundance and distribution in the RSA, with carry-over effects on seal harvesting.” Baffinland commits to “undertaking targeted ringed seal monitoring along the Northern Shipping Route that incorporates IQ and Inuit perspectives (including new ‘pathways of concern’ for ringed seal) into the design,

(Filing ID 333029); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.4:Marine Impacts – Shipping Impact on the Fall and Spring Habitat of the Seal), Moses Koonark at 0:55 -1:40 (Filing ID 333030); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 51-53 (Filing ID 32543); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1913:1 – 1913:7 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1906:4-1906:5 (Filing ID 333443).

²⁰⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA -10, pp. 21-22 (Filing ID 334147); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 1:Introduction), Jaykolasie Killiktee at 2:06-2:15 (Filing ID 333024).

²⁰⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA -10, p. 22 (Filing ID 334147).

²⁰⁸ 2021-10-20 MHTO Ltr to NIRB Re Response on BIM Written Comments, pp. 2-3 (Filing ID 337078); 2021-10-02 BIM Comments and Resp, para. 68 (Filing ID 336935)

²⁰⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-18, p. 46 (Filing ID 334147).

²¹⁰ 2021-10-02 BIM Comments and Resp, para. 139(Filing ID 336778)

planning and implementation of this monitoring program.”²¹¹ While this development is welcome, it comes far too late in the process.

282. Given the significance of seal to MHTO members, the consideration of IQ should have taken place before Baffinland submitted its application for the Project and should have informed the significance determination for impacts of the Project to seal, and the development of monitoring plans and adaptive management plans.

283. The Board should no longer have confidence in Baffinland’s determination of the significance of the Project impacts on seal given the reports of Inuit. Baffinland should be required to verify its significance determination with data from the Project area prior to a recommendation on the Project. Similar to narwhal, an analysis of the cumulative effects to seal and seal harvesting, including the potential accumulation of project-related impacts on seal since project-related shipping began in 2015 needs to be undertaken and the significance determination for the Project reconsidered.

284. The best evidence that the Board has before it with respect to the actual impacts of marine shipping in the area is the observations of Inuit. Based on this evidence, the adverse impacts of the Project to seal and seal harvesting will likely be significant.

ii) Baffinland has not Adequately Assessed Impacts of Marine Shipping and use of Ice-breakers on Seal

285. Baffinland acknowledges in response to a question from the Board that:

ringed seal are highly dependent on local ice conditions in their environment and how this may change from year to year, particularly when it comes to their selection of areas for maintaining subnivean (space between ice and fallen snow) breathing holes/lairs during the winter, but also because of the stable platform they require for pupping and nursing, mating and moulting.²¹²

286. Despite this acknowledgement, Baffinland has not adequately assessed the impacts of marine shipping and use of ice-breakers on seal, including the potential for impacts due to disruption of sea ice in the shoulder seasons.²¹³

287. Baffinland downplays the significance of the interruption of critical life cycle periods of seal by marine shipping and use of ice-breakers, such as moulting and breeding. Baffinland

²¹¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-18, pp. 45- 46 (Filing ID 334147).

²¹² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-74, p. 13 (Filing ID 334147).

²¹³ In regards to seal, DFO can confirm that there has not been a vast amount of research that has been done on the impact of ice breaking or shipping on seals during the shoulder seasons. Therefore, there's a considerable amount of uncertainty as to how seals will react to these activities and which habitats they will choose, but we thank you for sharing your knowledge on important areas for habitats for seals. NIRB Public Hearing Transcripts for April 13, 2021, Vol. 14, pp. 2728:4 - 2728:11 (Filing ID 335047) Gabriel Bernard-Lacaille, DFO.

notes that during the ringed seal moulting period “no mortality would be expected to occur from seals entering the water marginally more than they normally do at this time of year”.²¹⁴

288. However, the focus on mortality disregards the potential for interruption of the lifecycle of seal to have long term impacts on the risk of disease and the viability of the population.²¹⁵ Further, female seals become pregnant during the fall and they, as well as males, use the thin-ice to select their over-wintering (denning) habitat. Interruption of this critical time by icebreaking could have population impacts.²¹⁶

289. In response to the Board, Baffinland acknowledges a study that showed that industrial disturbance has resulted in a significant increase in the abandonment rate of breathing holes and lairs (13.5%) for seals.²¹⁷ However, Baffinland does not incorporate these findings into its significance determination and concludes, without support (or adequate monitoring of seal), that effects for use of ice-breakers would be a “localized temporary avoidance response” and a “temporary loss in sea ice habitat in the immediate footprint of the icebreaker, equivalent to approximately 0.33 % of available sea ice habitat in the RSA.” Baffinland theorizes that is not “expected to result in a population-level effect on ringed seal.”²¹⁸

290. Similar to narwhal, Baffinland’s definition of “localized” and “temporary” in this context remains unclear. Baffinland does not address the IQ that has reported a decrease in seal abundance in Eclipse Sound and especially in Milne Inlet. MHTO is left wondering whether seal moving out of Milne Inlet and Eclipse Sound counts as “localized temporary avoidance response”. The reduction in seal abundance has had a significant impact on harvesting.

291. In response to a question from QIA about support for the proposition that seal will become habituated to shipping, Baffinland references studies that concluded that “Ringed seals were observed at nearly identical rates with no airguns, one airgun, or when a full airgun array was firing (Harris et al. 2001)” and that “Harbour and grey seals at some haul-out sites appear to have habituated to close approaches by tour boats (Bonner 1982 in Baffinland 2012)”. Neither of these studies considered the volume of shipping and use of ice-breakers that is being contemplated for the Project and cannot be relied upon as accurate predictors of effects.²¹⁹

292. Baffinland looks at the loss of sea ice habitat as a percentage of the entire regional study area and fails to consider how the potential for seals to abandon the areas traditionally relied

²¹⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-9, p.21 (Filing ID 334147).

²¹⁵ We don't directly monitor health in ringed seal as part of our monitoring program. NIRB Public Hearing Transcripts for February 2, 2021, Vol. 8, pp. 1442:18 - 1442: 19 (Filing ID 333452) Phil Rouget, Baffinland.

²¹⁶ Inuit know fall season is important for seals. People even chuckled here when Baffinland scientists said seals mate in the spring, because we watch and we know that fall is the time for gathering, what we call -- is their mating and when females are implanted with their embryos. NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1905:19 - 1905:24 (Filing ID 333443) Eric Ootoovak, MHTO; 2021-10-20 MHTO Ltr to NIRB Re Response on BIM Written Comments, p. 5 (Filing ID 337078).

²¹⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: NIRB-75 Attachment 1: Icebreaking Impacts on Ringed Seal, PDF p. 96 (Filing ID 334147).

²¹⁸ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: NIRB-75 Attachment 1: Icebreaking Impacts on Ringed Seal. PDF p. 95 (Filing ID 334147).

²¹⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-8, p. 21 (Filing ID 334147).

upon by MHTO members for harvesting would impact members and be felt locally.²²⁰ Further, in the assessment of icebreaking operations, Baffinland notes that it “is assumed that approximately 70 to 200 ringed seal in Milne Inlet and Eclipse Sound will exhibit avoidance of the icebreaking noise source per icebreaker transit, this represents <1 % of the population of ringed seals in the Canadian Arctic.” The scale of the impact presented as a percentage of the seals in the Canadian Arctic is not useful when considering impacts to Inuit in the North Baffin region, and particularly, those of Mittimatalik.²²¹

293. Baffinland has not considered the significance of the effects of increased marine shipping and use of ice-breakers on the hunting effort of Inuit. Focusing on “effects at the population level”, or “large-scale avoidance of displacement effects” or “available sea ice habitat in the RSA”, does not capture the impacts to MHTO members hunting practices and required hunting effort.²²² It ignores that displacement on a small scale can have a significant impact on hunting effort. Further, it ignores that if members are not able to access traditional hunting grounds due to disruption of the sea ice, they will not be able to harvest and will be presented with additional risks to human health and safety in navigating interrupted sea ice or from travelling longer distances to search for seals.

iii) Baffinland has left the Monitoring and Mitigation Measures to be developed after Approval

294. The monitoring and mitigation plans for the impacts of the Project on seal have been left to be developed after the hearing before the Board.²²³

295. MHTO does not know whether current impacts of marine shipping and use of ice-breakers on Inuit seal harvesting can be mitigated, or what measures will be taken to mitigate those impacts. Baffinland has not shown how the vast increase in shipping can be altered in order to address the reported impacts to Inuit harvesting rights and still manage to achieve production targets and economic viability for the Project.

296. EWIs and thresholds are still in the process of being developed and, as noted above, Baffinland has not adequately monitored seal abundance.²²⁴ Baffinland acknowledges that “[t]here are no existing early warning indicators for impacts to Inuit harvesting (per level of effort) of seal and narwhal in Baffinland’s management plans”.²²⁵

297. Currently, Baffinland proposes one EWI for seal impacts from icebreaking – a 25% decrease in seal density throughout the local study area. For this lone indicator, there are no low

²²⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: NIRB-75 Attachment 1: Icebreaking Impacts on Ringed Seal. PDF p. 94 (Filing ID 334147).

²²¹ 2019-05-17 Baffinland Assessment Icebreaking Ops during Shipping Season Pt 1, s. 5.6.3, p. 77 (Filing ID 325033).

²²² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-10 and MHTO-19, pp. 21, 47 (Filing ID 334147).

²²³ NuPPAA, s. 103(1)(h), (i).

²²⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-10 and MHTO-19, pp. 21, 47 (Filing ID 334147).

²²⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-10 and MHTO-22, p. 49 (Filing ID 334147).

risk or moderate risk thresholds or responses proposed. For a high risk response, Baffinland notes that it “[w]ill be developed concomitant with the High Action Level Development response plan” and implemented if causal effect or likely relationship is determined.”²²⁶

298. Baffinland notes that this indicator will be “contingent on running a ringed seal aerial survey program or equivalent.”²²⁷ Baffinland has not yet developed the monitoring program.

299. Baffinland’s plans for how to monitor and address impacts to seal have not been developed to a sufficient degree to know whether impacts to seal will be able to be captured and mitigated. Notably, Baffinland has failed to capture existing impacts. Further, as with narwhal, a lone indicator is not sufficient to capture impacts. Abundance surveys have low confidence ratings and they do not capture impacts to body condition for seal that are being observed by Inuit.

300. Prior to the Board considering the recommendation on the Project, in consultation with affected communities, Baffinland should update its assessment of the Project’s potential impacts on seal and seal harvesting taking into account the current cumulative impact loads (as reported by IQ and monitoring) on seal and seal harvesting and develop effective measures to mitigate impacts.

301. Further, mitigation measures should be developed and implemented for the existing project impacts. The seal population should then be monitored to determine whether the measures are effective at mitigating the observed decline/avoidance of seal.

iv) Conclusion

302. Given that seal and seal harvesting rights are experiencing significant adverse effects at the current level of shipping and associated icebreaking, but which have not been recognized or mitigated by Baffinland, too much uncertainty remains with respect to the ability of Baffinland to prevent, mitigate and manage vastly expanded marine shipping for the Project to support a recommendation of Project approval. In other words, Baffinland has not discharged its burden by showing that it can prevent, mitigate and manage the impacts of the expanded Project on seal and seal harvesting.

5. Impacts of the Project on Caribou and Caribou Harvesting

303. Caribou are critically important to the Inuit way of life.²²⁸

304. Caribou are core to the terrestrial hunting and subsistence for Pond Inlet community members.²²⁹ They continue to be a source of food security.²³⁰

²²⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1a MMP TARP and Mitigation Toolkit, PDF p. 281 (Filing ID 334147).

²²⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1a MMP TARP and Mitigation Toolkit, PDF p. 281 (Filing ID 334147).

²²⁸ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 61-62 (Filing ID 32543).

²²⁹ 2019-06-14 Tusaqtavut Study-Pt 4, p. 62 (Filing ID 32543).

²³⁰ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 70-71 (Filing ID 32543).

305. The Project area has long been and continues to be a place where caribou are harvested – hunting caribou in this area has been passed down through the generations from parents and grandparents. The continuity of these practices is of the utmost importance to the community.²³¹

306. The hilly and mountainous landscapes around Mary River and the mine site are known caribou calving grounds.²³² The congregation of caribou in the Mary River area is accompanied by linked caribou trails and migration routes throughout the interior of Baffin Island. Community members have returned to these sites to hunt caribou for generations.²³³

307. It is recognized that caribou cross through the valley where the Tote Road is located. Caribou have relied on the area for critical life stages (calving, post calving, migration, and breeding).²³⁴

308. Caribou hide is also relied upon for the making of clothing, bedding and sleds. The ability to craft clothing from caribou, to teach these skills, and to maintain the language around caribou harvesting and use, depends on there being enough animals with skins of sufficient quality to be harvested.²³⁵

309. Caribou are recognized to be sensitive and vulnerable to the impacts of industrial disturbance. Caribou in the territory - and Baffin Island caribou especially, are at a particularly vulnerable stage of their lifecycle.²³⁶

310. The Project Northern Transportation Route (Tote Road and Railway) will consist of, among other things:

- (a) 110 km of new linear disturbance in the form of the railway;
- (b) 280 truck loads of ore per day until rail operations begin;
- (c) 2 to 3 trains completing an average of 5 to 8 round trips per day and a maximum of 10 round trips per day; and
- (d) 50 trucks per day on the road every year for service vehicles.

311. Despite this extensive development within caribou habitat:

- (a) Baffinland has not taken into account the critical state of caribou in the territory;

²³¹ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 62, 67-69 (Filing ID 32543); NuPAA, ss. 90(b), (c), 103(2).

²³² 2019-06-14 Tusaqtavut Study-Pt 4, p. 62 (Filing ID 32543).

²³³ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 64-66 (Filing ID 32543).

²³⁴ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 64-69 (Filing ID 32543); 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF pp. 8-13, 41 (Filing ID 320562).

²³⁵ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 69-70 (Filing ID 32543).

²³⁶ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1935:19 - 1935:22 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1936:3 – 1936:7 (Filing ID 333443).

- (b) Baffinland has not grappled with, or integrated into its effects assessment, the fact that Inuit are observing less caribou and experiencing significant adverse impacts on their harvesting rights;
- (c) Baffinland has not undertaken sufficient monitoring;
- (d) Baffinland has not adequately considered the impacts to harvesting rights if caribou avoid the area or change their movement patterns due to the Project;
- (e) Baffinland's proposed early warning indicators and monitoring protocols remain undeveloped and will not capture Project effects; and
- (f) Baffinland has not provided sufficient evidence to support the effectiveness of mitigation measures, including making the railway "crossable".

312. In the result, Baffinland has not put sufficient information before the Board to show that it can prevent, mitigate and manage the significant adverse impacts of the expanded Project (properly characterized) on caribou and caribou harvesting to support a recommendation of Project approval.

i) Baffinland has not taken into account the critical state of caribou in the territory

313. Caribou abundance in the Arctic has been cyclical. As of 2019, Baffin Island caribou were confirmed to be in the "red phase" where caribou abundance is at a minimum (<10% of the peak), and it is assumed that they are still in that phase. In this phase, extirpation is possible for some or all of Baffin Island.²³⁷

314. Baffinland largely relies on what they term the current lack of interaction of caribou with the existing project infrastructure to excuse the lack of a rigorous assessment of the potential effects of the Project on caribou and the development of mitigations measures.²³⁸

315. For example, Baffinland notes that, "[i]t was not possible to monitor caribou reaction to sensory disturbance in the Project area (densities were too low)." ²³⁹ Baffinland further notes that "[g]iven 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."²⁴⁰

316. The fact that caribou are at a critical state in that their numbers are extremely low should not lessen the rigour of the investigation into the potential effects of the Project, including the

²³⁷ 2021-01-18 Management and Solutions Environmental Science, Review of Caribou Impacts for the Baffinland Phase 2 Development Proposal Hearing, p. 1 (Filing ID 332620).

²³⁸ 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF pp. 2, 75, 77, 89 (Filing ID 320562).

²³⁹ 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF p. 89 (Filing ID 320562) Baffinland Wildlife Baseline and Impact Assessment (Filing ID 320562).

²⁴⁰ 2018-10-03 Baffinland Technical Supporting Document 25: Socio-Economic Assessment, p. 123 (Filing ID 320585).

impact of 110 km of railway (300 km total) on the north Baffin caribou. Baffinland fails to account for in its assessment that caribou are at a tipping point and that additional disturbance at this time could impact the ability of the population to recover.²⁴¹

317. Baffinland has not adequately accounted for the critical state of caribou in its assessment and underestimates the impacts of the existing project operations. This adds considerable uncertainty to its conclusion that the Project will not have a significant adverse effect on caribou. Based on the experience of Inuit, the Project will have significant adverse impacts on caribou and caribou harvesting.

ii) Baffinland has not grappled with, or integrated into its effects assessment, the fact that Inuit are observing less caribou and experiencing significant adverse impacts on their harvesting rights

318. The Project overlaps with the North Baffin Group/Subpopulation Range.²⁴² IQ has confirmed that the Project area is prime caribou habitat that is relied on for critical life functions of caribou and the harvesting of caribou.²⁴³

319. Inuit have considerable knowledge about the behaviour of caribou in the region, but Baffinland has not integrated those perspectives into its assessment and impact predictions.²⁴⁴

320. Baffinland concludes in its assessment that “the effect on the ability of Inuit to harvest caribou will remain unchanged in comparison to the FEIS assessment” and “[t]he Phase 2 Proposal is not predicted to require Inuit to exert additional effort or cause difficulty in harvesting caribou under most circumstances.”²⁴⁵

321. Baffinland has not adequately accounted for the existing project impacts (and other cumulative impacts) on caribou and caribou harvesting in its assessment. Baffinland admits that “Baffinland did not assess cumulative impacts on caribou harvest (including harvest quotas)”. In Baffinland’s view “[i]t was not in the scope of the NIRB assessment.”²⁴⁶ Baffinland further admits that “[t]here is no information regarding caribou harvest per level of effort for Mittimatalingmiut.”²⁴⁷

²⁴¹ NuPPAA, ss. 90(d), (h), (i).

²⁴² 2021-01-18 Management and Solutions Environmental Science, Review of Caribou Impacts for the Baffinland Phase 2 Development Proposal Hearing, p. 2 (Filing ID 332620).

²⁴³ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 62-72 (Filing ID 32543).

²⁴⁴ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1917:26-1918:3 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:18- 1935:16 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1936:17 – 1936:24 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1937:2 – 1937:11 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1937:22 – 1937:26 (Filing ID 333443).

²⁴⁵ 2018-10-03 Baffinland Technical Supporting Document 25: Socio-Economic Assessment, p. 123 (Filing ID 320585); see also 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-31(a), p. 56 (Filing ID 334147).

²⁴⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-31(b), p. 56 (Filing ID 334147).

²⁴⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-33, p. 57 (Filing ID 334147).

322. Inuit have observed that since the existing project was developed caribou have declined in the region and moved out of the region. Inuit are reporting that they are no longer successful at finding caribou in the areas where they have traditionally been hunted, and that the existing project has disrupted movement patterns in caribou herds.²⁴⁸

323. Inuit hunters also expressed concerns that the existing project has displaced caribou from important calving grounds.²⁴⁹ Further, there are reports that the dust, traffic and noise have discouraged caribou foraging.²⁵⁰

324. Inuit are already experiencing significant adverse impacts to their harvesting rights on caribou. These existing impacts need to be properly integrated into the assessment and grappled with before significantly expanding industrial disturbance in caribou habitat.

325. Baffinland continues to point to the number of meetings that they have had with Inuit, regardless of whether those meetings were properly set up to collect IQ relating to caribou. In any event, having meetings is not the same as integrating Inuit perspectives into the assessment of impacts. Baffinland has still not done the work to understand how caribou use the habitat, their movement patterns, how they are hunted, and how they have been impacted.

326. Given the information available on caribou responses to anthropogenic disturbance, and the observations of the existing impacts to caribou by Inuit, Baffinland has not provided sufficient support for its conclusion that the Project – in combination with existing impacts – will not have a significant adverse effect on caribou and caribou harvesting.²⁵¹ Based on its view of the lack of current project interaction, Baffinland underestimates the existing and potential effects on caribou and the Inuit harvest of caribou – these effects will be significant.

iii) Baffinland has not undertaken sufficient monitoring

327. Inuit know that to find caribou and to understand their behaviour long periods of observation and patience are required.²⁵² Baffinland's monitoring for the existing project has not been sufficient to capture impacts to caribou, including the change in movement away from the existing project.

328. Baffinland has conducted caribou surveying from height of land points and undertaken track surveys along the Tote Road by riding in trucks. Further, Baffinland's current monitoring is infrequent and is focused on a small zone of influence that would not detect movements of

²⁴⁸ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 77-79 (Filing ID 32543); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:18-1934:23 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1935:25-1936:2 (Filing ID 333443); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.1:Terrestrial Impacts), Elijah Panipakoocho at 2:22 (Filing ID 333025).

²⁴⁹ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 78-79 (Filing ID 32543).

²⁵⁰ 2019-06-14 Tusaqtavut Study-Pt 4, p. 79 (Filing ID 32543).

²⁵¹ 2021-01-18 Management and Solutions Environmental Science, Review of Caribou Impacts for the Baffinland Phase 2 Development Proposal Hearing, p. 2 (Filing ID 332620).

²⁵² NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:2 – 1934:7 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1935:8 – 1935:16 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1936:17 – 1937:7 (Filing ID 333443).

caribou deflecting away from the Tote Road or current project activities. These are not adequate or appropriate survey methods in terms of frequency, duration and scale to properly track and sight caribou, and to understand the interaction of caribou with project infrastructure. These survey methods are not sufficient to capture whether caribou are moving away from the project infrastructure and whether barriers to movement exist.²⁵³

329. The Terrestrial Environment Working Group (“TEWG”) has raised concerns about the inadequacy of Baffinland’s monitoring programs. In the 2019-2020 Annual Report, the Board noted that:

Through the commenting period on the 2019 Annual Report as well as the TEWG meetings, the QIA and GN have noted concerns regarding adequacy of sampling efforts as well as the scale that these surveys are conducted. The current surveys are noting very few caribou sightings annually, suggesting that to further understand the caribou presence and ecology of the regional study area, it may be necessary to expand the scale of these efforts.²⁵⁴

330. The concerns with monitoring as raised by the TEWG have not been addressed such that data exists to support the impact predictions for the Project.

331. Baffinland acknowledges that their monitoring “informs only partially whether caribou may or may not be moving away from transportation and other Project infrastructure”.²⁵⁵

332. Baffinland has committed to support the Government of Nunavut in their region wide surveys.²⁵⁶ However, this commitment comes too late. Understanding the existing impacts of the project (in combination with other disturbance), is critical to understanding the expanded Project impacts.

333. Further, a commitment to “support” a regional survey program is not an adequate replacement for Project specific monitoring to confirm EIS predictions, capture evidence of Project impacts, and develop appropriate mitigations.

334. The Government of Nunavut studies will most likely be focused on the state of the caribou herd in general, not the specific Project contribution to impacts that would result in the development and implementation of mitigation measures. Further, with only regional monitoring, there is a real risk that Baffinland will not accept that their Project is contributing to the impacts to the caribou population and that they need to make adjustments to their operations. The record already reflects this with Baffinland’s denial of the road as a barrier to

²⁵³ “Height of land surveys are only one way to find caribou and to monitor them, and they have to be done correctly with enough time and resources devoted to searching.· Baffinland goes out -- goes out a few times a year or each year and sits for 20 minutes, then moves on.· They found eight caribou one year and no caribou any other year since 2013.· Yet hunters find caribou. We find them, and we watch them, and we learn how they are behaving.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1935:8 - 1935:16 (Filing ID 333443) Eric Ootoovak, MHTO.

²⁵⁴ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 35 (Filing ID 332232).

²⁵⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-14, p. 43 (Filing ID 334147).

²⁵⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-14, p. 43 (Filing ID 334147).

movement, despite evidence of only one caribou crossing the Tote Road since operations began in 2015.²⁵⁷

335. Baffinland notes in response to the Government of Nunavut that:

Mitigations will be applied where a correlation is made apparent between caribou diversions and the North Railway, and may include construction of additional, or extended crossings, at a length and slope to be determined in collaboration with the TEWG.²⁵⁸

Drawing these correlations will not be possible without adequate historical data and consistent Project monitoring at appropriate scales to understand the drivers of change to the caribou herd.²⁵⁹

336. Further, Baffinland’s comment that “[u]ntil a sufficient number of caribou interact with the project increasing monitoring will not be able to determine if there are any project effects”²⁶⁰ disregards that due to caribou’s recognized behaviour of moving away from human activity significant numbers of caribou may never interact with the Project. This does not mean that there is no effect. Baffinland does not indicate how its monitoring has captured or will capture these effects of caribou displacement and avoidance.

337. Baffinland has not accurately captured the impacts of the Project on caribou, in combination with other past, present and reasonably foreseeable future cumulative effects causing agents, and its impact predictions on caribou are not supported by monitoring data at appropriate scales. A plan for monitoring Project impacts to caribou in consultation with impacted communities that sufficiently monitors impacts on caribou at appropriate scales, duration and frequencies, and the factors necessary to draw a link with the Project has not been developed.

iv) Baffinland has not adequately considered the impacts to harvesting rights if caribou avoid the area or change their movement patterns due to the Project

338. As set out in the literature review provided by Management and Solutions Environmental Science (“MSES”), there is “overwhelming evidence in scientific literature that caribou avoid human activities”.²⁶¹

339. Baffinland has yet to meaningfully consider the zone of influence of the Project and cumulative barriers to movement for caribou, and subsequent impacts on harvesting rights.²⁶²

²⁵⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-17, p. 45 (Filing ID 334147).

²⁵⁸ 2020-01-06 Baffinland Iron Mine Corporation Phase 2 Proposal Updated Information Package, p. 5 (PDF p.47) (Filing ID 327957) (emphasis added).

²⁵⁹ See for example 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: GN-3(2), PDF p. 69 (Filing ID 334147).

²⁶⁰ 2020-10-14 Baffinland Response to Comments Received by MHTO Concerning Engagement on Outstanding Phase 2 Technical Issues Between November 2019 and September 2020, PDF p. 8 (Filing ID 331755).

²⁶¹ 2021-01-18 Management and Solutions Environmental Science, Review of Caribou Impacts for the Baffinland Phase 2 Development Proposal Hearing, p. 1 (Filing ID 332620).

²⁶² NuPAA, ss. 103(1)(f), (i), 103(2), 90(i).

The zone of influence of the Project could have a significant impact on harvesting rights if caribou avoid the area or change their movement patterns due to the industrial disturbance by the Project. Inuit are already observing these impacts.²⁶³

340. Further, Inuit hope that caribou will one day recover their population levels. It is, therefore, critical that any industrial activity is developed in a way that does not impede that recovery and is responsive if the population numbers increase. Industrial activity that has the potential to interrupt this recovery or result in the re-location of caribou from the places that they have traditionally been harvested will have a significant impact on Inuit.

341. Baffinland acknowledges that “[w]hen migratory caribou return to the area (as predicted by IQ), there may be an increased potential for Project effects on caribou movement”, but notes that additional mitigation can be implemented to address effects. Baffinland does not indicate what those mitigation measures would be and as set out below proposed mitigation measures remain unproven.²⁶⁴

342. Baffinland did not consider any changes to their “conceptual” 14-km radius zone of influence for the Project as in Baffinland’s view the Project has a “limited addition to the Proposed Development Area”.²⁶⁵ Baffinland fails to consider that the Project will introduce 110 km of new linear disturbance in the form of a railway, along with the road and southern railway, that would bisect caribou habitat and may prove impossible, or a deterrent, for caribou to cross.

343. Baffinland has not properly considered the cumulative effect of the road and the rail, along with other Project infrastructure (and other any other project that has been carried out, is being carried out or is likely to be carried out) on caribou movement. In Baffinland’s view, the “North Railway combined with the Tote Road did not present any new interaction mechanisms that had not already been considered in the Mary River Project's effects assessment.”²⁶⁶ Yet, Baffinland acknowledges that there are no other Arctic projects that have “a road and rail that have conducted studies to determine if there is a ZOI”.²⁶⁷

344. Baffinland has not provided any support for its conclusion that the “ZOI is reduced to that of the rail operation which is less intense due to fewer vehicle (rail car) passes, lower amounts of fugitive dust emissions, likely reduced noise, etc”²⁶⁸, or its limitation that “[t]raffic

²⁶³ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 77-79 (Filing ID 32543).

²⁶⁴ 2019-10-16 BIMC Part 1 Response to FWS - Appendix C Response to QIA, PDF p. 67 (Filing ID 327140); 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-6(b), p. 6 (Filing ID 334147); 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF p. 73 (Filing ID 320562).

²⁶⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-13, pp. 42- 43 (Filing ID 334147).

²⁶⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-31, p. 56 (Filing ID 334147).

²⁶⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-13, p. 42 (Filing ID 334147).

²⁶⁸ 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF p. 75 (Filing ID 320562).

as a barrier to caribou movement was quantified as a proportion of day that individual animals may experience vehicle passes (train sets, trucks, etc.).”²⁶⁹

345. Baffinland indicates that the infrastructure of the Phase 2 Proposal “does not intersect traditional movement corridors, and therefore will not present substantial barriers to caribou movement”. However, this disregards that caribou move other than on well-worn trails. Further, Baffinland recognizes that their current monitoring programs with existing caribou density “cannot provide evidence demonstrating that the road is not a barrier to caribou movement” and only note one example of a caribou crossing the Tote Road since operations began.²⁷⁰

346. Baffinland dismisses a publication by the Government of Nunavut documenting changes in movement patterns due to a road by noting that “changing patterns have not yet been determined to cause an impact at a population level”.²⁷¹ This ignores the fact that changing movement patterns would be devastating to Inuit harvesting rights, even without population level impacts.

347. It is not sufficient that Baffinland proposes in commitment 65 to undertake research to estimate the zone of influence of the Project on caribou after Project approval and only when appropriate numbers of caribou are available.²⁷² This is essential information for the Board to gauge and define the extent of the impacts of the Project on Inuit harvesting rights and to ultimately consider whether the Project reflects the priorities and values of the residents of the designated area and is in the regional and national interest.

348. MHTO submits that there is an unacceptably high level of uncertainty regarding Baffinland’s predictions of how caribou will interact with the Project infrastructure and how the Project will impact caribou movement and the subsequent impacts on harvesting rights and hunting effort. Contrary to the conclusions of Baffinland, and considering caribou’s recognized behaviour of moving away from anthropogenic disturbance, the Project is likely have a significant adverse impact on caribou and caribou harvesting.

v) Baffinland’s proposed early warning indicators and monitoring protocols remain undeveloped and will not capture Project effects

349. Baffinland proposes as EWIs to use a combination of habitat effectiveness, caribou distribution and calving.²⁷³ Baffinland proposes vague thresholds for these indicators and does not develop monitoring programs to support their effective implementation.

350. To warrant a moderate level response Baffinland requires “10% effective habitat loss as determined by collar analysis” and “Caribou visibly disturbed and displaced at a local level by

²⁶⁹ 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF p. 79 (Filing ID 320562).

²⁷⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-17, p. 45 (Filing ID 334147).

²⁷¹ 2018-10-03 TSD 10 Terrestrial Wildlife Baseline and Impact Assessment, PDF p. 90 (Filing ID 320562).

²⁷² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-14, p. 23 and MHTO-13(a), p. 42 (Filing ID 334147).

²⁷³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

Project activities, However, they still calve and use habitat of comparable quality within the RSA (may require regional monitoring) with no changes to caribou health.”²⁷⁴

351. To warrant a high-level response, Baffinland requires “15% effective habitat loss as determined by collar analysis” and “Caribou displaced extensively by Project activities at a regional level; calving habitat effectiveness is significantly reduced; calving success is reduced and/or caribou health is impacted.”²⁷⁵

352. Baffinland does not indicate what “visibly disturbed” or “displaced extensively” means to Baffinland. These are subjective criteria. Baffinland provides a definition of “effective habitat”, but does not provide sufficient information on how it will be calculated for the Project.²⁷⁶

353. Further, Baffinland does not develop monitoring programs to be able to monitor all the factors necessary to determine whether these thresholds have been reached. In the proposed monitoring, Baffinland proposes regional collaring data model analysis and height of land surveys. Baffinland does not indicate how it plans to monitor for calving success/ caribou health/ habitat effectiveness and what baseline data will be used.²⁷⁷

354. For the response to a high-level threshold, Baffinland notes that it “[w]ill be developed concurrent with the High Risk status/threshold development a formal Response Plan.”²⁷⁸ This response will only be implemented if “causal effect or likely relationship is determined.” However, Baffinland has not developed sufficient monitoring protocols for the factors necessary to determine a relationship with the Project (see discussion below in the section entitled Level of Certainty Required and Working Group Decision-making).²⁷⁹

vi) Baffinland has not provided sufficient evidence to support the effectiveness of mitigation measures, including making the railway “crossable”

355. Baffinland recognizes that there is “some uncertainty remaining in the impact conclusions” for caribou.²⁸⁰ Baffinland notes in response to a question from the Board that to address this uncertainty, it “has committed to extensive mitigation to accommodate caribou

²⁷⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

²⁷⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

²⁷⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

²⁷⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

²⁷⁸ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

²⁷⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF pp. 291-292 (Filing ID 334147).

²⁸⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-6, p. 6 (Filing ID 334147).

movement”.²⁸¹ Yet, Baffinland has not provided sufficient evidence to support the effectiveness of these proposed mitigation measures.²⁸²

356. Baffinland proposes to make the railway “crossable” for some of its length.²⁸³ However, there is not sufficient evidence to support that caribou will make use of these “crossings”. What Inuit know about caribou is that they avoid industrial disturbance. Thus, there is a very real possibility that caribou will avoid the railway entirely, resulting in a severance of their habitat and interruption of their movement patterns.²⁸⁴ Baffinland has not considered this possibility in its effects determination or in developing its mitigation measures.

357. Further, adaptive management after the railway has been built will not address these impacts. Baffinland needs to provide a fulsome assessment that takes into account the impacts of caribou avoiding the railway and determines whether there are any measures to address these impacts prior to the Board remitting a recommendation on the Project.

358. Where you are dealing with 110 km (300 km total) of new linear disturbance with trains running 339 days per year in the habitat of an extremely vulnerable species, it is not appropriate to take the approach of studying mitigations later.²⁸⁵ Further, adaptive management, requires that there are adaptations that can be made to lessen the effects of the Project. Baffinland has not shown what those measures would be, and whether they would be effective, if the Project proves to have significant effects on the vulnerable caribou population.

359. Baffinland does not have any tools in its “Mitigation Toolkit” to address if caribou do not cross the railway or make use of the crossings.²⁸⁶

360. If caribou do decide to cross the railway, Baffinland proposes to address this through the caribou decision framework. However, Baffinland has also failed to sufficiently consult on and develop this mitigation measure to show that it will be effective in reducing the risk of the railway to caribou. This is despite MHTO continually raising the concern about caribou getting stuck on the railway and killed.²⁸⁷

²⁸¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-6, p. 6 (Filing ID 334147).

²⁸² NuPPAA, ss. 103(1)(h), (i).

²⁸³ 2019-10-16 BIMC Part 1 Response to FWS - Appendix B Response to MHTO, PDF p. 49 (Filing ID 327140)

²⁸⁴ “Linear infrastructure is a barrier for species like caribou. Inuit know this. This is our professional judgment, and if there is one thing we can -- we are experts on, it is our animals and how they respond to human activities and changes in their environment.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:18 - 1934:23 (Filing ID 333443) Eric Ootoovak, MHTO.

²⁸⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-20, p. 25 (Filing ID 334147).

²⁸⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1B TEMMP TARP and Mitigation Toolkit, PDF p. 295 (Filing ID 334147).

²⁸⁷ 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.1: Terrestrial Impacts), Jaykolasie Killiktee at 1:57-2:18 (Filing ID 333025); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1935:21 – 1936:7 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1937:22 – 1938:11 (Filing ID 333443).

361. Baffinland has not provided evidence to demonstrate that it will be possible for a train to slow down or stop if caribou are on the track. Baffinland merely notes that “the direction is given to our operations to slow or stop and wait for them to pass, if it is safe to do so”.²⁸⁸ However, trains take a long time to slow down and stop, more so if they are fully loaded. A direction to slow down or stop is not useful if the trains cannot do so safely in time to avoid caribou or if there are insufficient measures to monitor the presence of caribou.²⁸⁹

362. In response to a question of the Board about the consultation that has been undertaken on this framework, Baffinland notes that it “has contracted a rail company that is aware of the decision framework and understands the implications on the operations.”²⁹⁰

363. Baffinland makes the general statement in response to a question from QIA that “[i]t is unlikely that caribou will surprisingly appear at the railway without earlier warning from local harvesters and observations from all other Project monitoring initiatives”.²⁹¹ The limitations of Project monitoring have been discussed above. Baffinland has not provided evidence that the 110 km of railway will be sufficiently and continuously monitored to ensure that caribou presence is known in time to stop the train.

364. The Board does not have sufficient information to know that trains will be notified in time to be able to slow down and stop in order to prevent collisions with caribou. Baffinland has not provided sufficient evidence to support the effectiveness of mitigation measures.

vii) Conclusion

365. Given the importance of the recovery of caribou to Inuit, there remains an unacceptably high level of uncertainty in Baffinland’s assessment with respect to the impacts of the Project on caribou and caribou harvesting, and how caribou will react to an additional, raised linear disturbance, in combination with existing disturbances. Baffinland has underestimated the impacts to caribou and caribou harvesting, and failed to properly take into account past, present and reasonably foreseeable future cumulative effects causing agents.

366. Baffinland has failed to consider IQ of the existing impacts to caribou and caribou harvesting. From the information that is known about the caribou population, the Project will visit significant adverse impacts on this vulnerable population with the potential for these impacts to be fatal to the Baffin Island caribou herd.

367. Baffinland has further not shown that the impacts on caribou and caribou harvesting would be prevented, mitigated, or managed through its proposed plans and conditions in order to support a recommendation of Project approval.

²⁸⁸ 2019-10-16 BIMC Part 1 Response to FWS - Appendix B Response to MHTO, PDF p. 49 (Filing ID 327140)

²⁸⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-16, p. 23 (Filing ID 334147).

²⁹⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-5, p. 5 (Filing ID 334147).

²⁹¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-16, p. 23 (Filing ID 334147).

6. Impacts to Freshwater and Fish and Fish Harvesting

368. Fishing is an essential component of the Inuit way of life and contributes significantly to food security for community members of Pond Inlet.²⁹²

369. Fishing occurs in the Project area year-round, particularly for char in the areas of Lake Qurluqtuq and Tuugat Lake (which are accessed from Qinnngua), and in the small lakes and rivers of the Phillips Creek and Mary River watersheds.²⁹³

370. Community members return to the same fishing locations year after year. As a result, many fishing sites are intimately connected to travel routes, camps and dwelling locations, and important sites for cultural transmission.²⁹⁴

371. MHTO remains concerned that the impacts to freshwater and fish have not been adequately assessed and addressed for the Project.²⁹⁵

i) Baffinland has failed to assess impacts to Qurluqtuq Lake and the surrounding watershed

372. Inuit have stated there are impacts from current operations on Qurluqtuq Lake fish and water quality. Qurluqtuq Lake is a key resource for Inuit yet it has received no consideration in Baffinland's prior monitoring or in the Project assessment.

373. Baffinland has not monitored Qurluqtuq Lake in terms of dust, sediments, and fish health. Baffinland has limited its consideration to water bodies where there is physical interaction with the Project.²⁹⁶ This information should be gathered prior to the consideration of the Project and the increase in production. This is an impact that Inuit are currently experiencing that is not accounted for in the Project assessment or proposed mitigations.²⁹⁷

ii) Baffinland has failed to assess impacts to harvesting rights for Fish

²⁹² 2019-06-14 Tusaqtavut Study-Pt 5, p. 90 (Filing ID 325454).

²⁹³ 2019-06-14 Tusaqtavut Study-Pt 5, pp. 90-91 (Filing ID 325454), NuPAA, ss. 90(b), (c), 103(2).

²⁹⁴ 2019-06-14 Tusaqtavut Study-Pt 5, pp. 91 (Filing ID 325454).

²⁹⁵ 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.2: Terrestrial Impacts-Dust), (Filing ID 333026); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1939:4 – 1939:14 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:19 - 1945:5 (Filing ID 333443).

"In Milne Inlet, the pictures show a lake in a place called Koluktoo Bay. That is also -- we see iron pigmentation of -- from iron dust, and near the Mary River freshwater area, the iron dust spreads to an area up to 30 kilometres, and sometimes it goes beyond 30 kilometres. If you could imagine, Mittimatalik here to Bylot Island, it's about 22 kilometres. Similarly, the iron dust travels and beyond, and it's difficult to find fresh water." NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, 1941:19 - 1942:1 (Filing ID 333443) Enookie Inuarak, MHTO.

²⁹⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-30, p. 55 (Filing ID 334147).

²⁹⁷ NuPPAA, ss. 103 (e), (f), (g), (i).

374. Baffinland's impact assessment has not adequately considered impacts to harvesting rights related to fish.²⁹⁸

375. Arctic char are a primary source of country food for MHTO members and a food that marine mammals rely on.²⁹⁹ As stated by Eric Ootoovak in the public hearing: "Fish, char, are very important to us, but the food security assessment and socio-economic assessment didn't mention harvesting char".³⁰⁰ MHTO has no assurance that current project activities are not already having an impact and is critically concerned about the impacts of the expanded activities for the Project.

376. Baffinland generally states in response to a question from MHTO that:

Impact to the Inuit harvest of anadromous fish are not expected on the basis that the key fishing waterbodies are removed from the Project area, and there is no physical interaction with these waterbodies or reductions in their accessibility. With respect to landlocked arctic char, the information collected indicates that fishing of land-locked arctic char near the project likely occurs only incidentally during other land use activities.³⁰¹

377. Baffinland does not deal with the impacts of dust from the Project and how that has resulted in contamination, or a perception of contamination, that has interrupted the harvesting of fish in key areas. Baffinland further has not collected sufficient IQ to support the general statement that landlocked Arctic char are only fished "incidentally".

378. Baffinland has not conducted the fish health monitoring it was supposed to do per Condition 48 of the current project certificate. The Board notes in the 2019-2020 Annual Report:

Baffinland is required pursuant to Condition 48a to develop plans to conduct additional surveys for the presence of Arctic char in freshwater bodies and ongoing monitoring of Arctic char health where applicable, within watersheds proximal to the mine, Tote Road and Milne Inlet Port project development areas, including but not limited to, Phillips Creek, Tugaat, and Qurluktuk. It is also expected that the Proponent shall consult with the Mittimatalik Hunters and Trappers Organization (MHTO) regarding the design, timing, and location of proposed surveys and ongoing monitoring. The Monitoring Officers note from Baffinland's 2019 Annual Report, that Arctic char population surveys have been undertaken in Camp Lake, Sheardown Lake, Mary Lake and in Reference Lakes near the Mine Site as part of the Project's Core Receiving

²⁹⁸ NuPPAA, ss. 103 (e), (f), (g), (i).

²⁹⁹ 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.1: Marine Impacts – Dust Pollution), Elijah Panipakoocho at 3:14-3:52 (Filing ID 333027); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1909:8-1909:20 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:6 – 1944:8 (Filing ID 333443).

³⁰⁰ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, 1944:6 - 1944:8 (Filing ID 333443) Eric Ootoovak, MHTO.

³⁰¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-30, p. 55 (Filing ID 334147).

Environment Monitoring Program (CREMP), but no information was provided on the status of Arctic char health monitoring in those watersheds listed in the Project Certificate.³⁰²

379. Term and Condition 48(a) also requires Baffinland to provide plans to conduct additional surveys for the presence of Arctic char in freshwater bodies and implement ongoing monitoring of Arctic char health in areas affected by the Project in consultation with the MHTO. Term and Condition 113 specifically requests monitoring for Arctic char stock sizes. The Board notes in the 2019-2020 Annual Report that “further consultation with the MHTO is required to develop and incorporate community-based monitoring into Baffinland’s ongoing monitoring programs.”³⁰³ The Board noted in the 2020-2021 Annual Report that the Condition 48(a) is still outstanding and asked for clarification on whether the monitoring of stock sizes under Condition 113 is happening.³⁰⁴

380. In response to a question from the Board, Baffinland indicates that it committed to conducting Arctic Char monitoring in the surrounding areas of Milne Port during the 2021 open water season in consultation with MHTO. The details of this monitoring program and the water bodies that this monitoring is to be applied to are still to be determined.³⁰⁵

381. While this commitment is welcome, it comes too late. Inuit have been reporting impacts on water quality and harvesting, but Baffinland has not done the work to understand these impacts in advance of its application to substantially increase operations. This is information that the Board needs to determine whether the Project is in the regional interest and that MHTO needs to understand the impacts to harvesting rights.

382. MHTO recommends that prior to a recommendation on the Project that Baffinland undertake studies to understand the impacts of the project on fish health in consultation with MHTO and revisit its impact predictions in relation to the impacts of the Project on the harvest of fish in light of this study.

383. On the information before the Board, Baffinland has not discharged its burden to show that it has accurately assessed the impacts to freshwater, fish and fish harvesting for the Project, and shown that it will be able to prevent, mitigate and manages those impacts based on its proposed plans and conditions.

7. Impacts of Dust on Harvesting

i) Baffinland has failed to assess impacts of dust to harvesting rights

³⁰² 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 35 (Filing ID 332232).

³⁰³ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 36 (Filing ID 332232).

³⁰⁴ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, pp. 20, 35, 89-90 (Filing ID 337185).

³⁰⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-16, p.9 (Filing ID 334147).

384. The dust from the existing project has impacted the landscape on which Inuit practice their harvesting rights.³⁰⁶ This is illustrated from the pictures provided by MHTO in the presentation to the Board as set out below.



³⁰⁶ Nunavut Agreement, s. 20.2.4.

385. Examples of the Inuit concerns about the impacts of the dust were captured in interviews for the Northern Contaminants Program:³⁰⁷

“Coming from here and on going up near Iluvilik, there’s red powdery dust everywhere on the ice, but as coming closer over there more red dust is all over the ice, that type of dust melts the snow faster and some of it is real red colour.” Abraham Kunuk

“That probably is impacting wild animals and fish that there, because of dust being blown away everywhere there, and that can cause fish impacted as well, when the ice melts there, that will become muddy with iron in the water and the water species that fish and seal eats can be effected on, that’s my point of view.” Moses Konark

386. The Board noted that dustfall from the existing project operations has exceeded predictions and that there are concerns that the impacts have not been properly monitored and mitigated as follows:

Baffinland reported pursuant to Term and Condition 21 of the Project Certificate that annual terrestrial dustfall exceeded the predicted threshold levels at select locations of the Project site. These exceedances occurred despite application of dust suppressant along the Tote Road and implementation of dust management protocols across the site suggesting that modeling prediction have underestimated dustfall across the site. The amount of dust entering the aquatic and marine environments, including on sea ice directly, from key sources such as crusher, screen, ore stockpiles is not fully known and there are concerns from the communities that impacts have not been properly monitored and mitigated.³⁰⁸

387. Dust remains an ongoing concern. Inuit rely on the snow for drinking while out on the land. The perception that the snow is contaminated by the dust from the project operations has already impacted harvesting rights. As stated by Eric Ootoovak in the public hearing:

To how our harvesting may be impacted by its dust, Baffinland's human health risk assessment gave no consideration to the mental stress and anxiety that comes from being hundreds of kilometres from home and not finding any snow or ice that isn't red with dust, but you need to make water for food and drinking.³⁰⁹

388. Further, there is concern about the impacts of dust on the marine and aquatic environments, including on sea ice.³¹⁰ Baffinland has not recognized or incorporated these impacts into its impact assessment for the Project.

389. Even if dust on snow does not exceed health standards (which has yet to be confirmed for the areas in which Inuit practice their rights), Baffinland fails to grapple with the fact that Inuit

³⁰⁷ 2021-02-04 Northern Contaminants Program 2017-2018 Synopsis of Research Report, pp. 13-14 (Filing ID 332990).

³⁰⁸ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, pp. 34-35 (Filing ID 332232).

³⁰⁹ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, 1944:12 - 1944:18 (Filing ID 333443) Eric Ootoovak, MHTO.

³¹⁰ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1912:9 – 1912:26 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1941:4 – 1943:19 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:9-1944:18 (Filing ID 333443).

may still avoid drinking snow covered by dust. The inability to drink from the land while harvesting seriously and significantly interrupts the ability of Inuit to be out on the land for long periods of time with consequent impacts to harvesting rights.

390. Further, as noted above with respect to narwhal and fish, the dust has the potential to contaminate the ecosystem and the traditional foods relied upon by Inuit. Perceptions that traditional foods are no longer safe to eat impacts harvesting.

391. Concerns about the impacts of dust have been raised by the TEWG since at least 2018.³¹¹ Yet, Baffinland has failed to adequately monitor the impacts of dust and implement effective mitigations. Baffinland has not collected baseline data to understand the extent of the impacts of the dust, including the extent that it is entering aquatic and marine environments, and the whether the dust is impacting country foods and contributing to increased toxicity.

392. Baffinland notes that it undertook a pilot snow sampling program in December 2020 in limited areas, which found that aesthetic drinking water guidelines were exceeded in the snowpack in areas with heavier dustfall. The study further showed increases in the amounts of cadmium, chromium, lead and arsenic in the areas with heavier dustfall. The study notes that in “no way should this be considered a final sampling program or protocol”.³¹² Baffinland goes on to state that a “greater database of information can be collected which can further the understanding of safety of drinking water sources”.³¹³

393. In the 2020-2021 Annual Report, the Board has acknowledged the need for additional monitoring to understand the impacts of dust. It was recommended that “Baffinland work with the Qikiqtani Inuit Association, Environment and Climate Change Canada, Government of Nunavut, and other members of the Terrestrial Environmental Working Group to explore and develop alternative dust collection methods such as the snow core sampling and that additional dust monitoring be implemented by the winter of 2022.”³¹⁴

394. As the safety of the water used when out on the land is critical to the continued ability to harvest for long periods of time, Baffinland should have assessed impacts from dust on harvesting rights in advance of applying to significantly expand operations, including by undertaking adequate sampling around Milne Port, the Mine Site, and the areas traditionally used by Inuit. The failure to adequately account for the impacts of dust to harvesting undermines the reliability of Baffinland’s assessment that impacts to the consumption of

³¹¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: NIRB – 79 Attachment 1: A Summary of Key Monitoring-Related Feedback/Suggestions Provided to Baffinland by the Working Groups since 2018, PDF p. 99 (Filing ID 334147).

³¹² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: MHTO-12 Attachment 1: Memo on Snow Sampling, PDF p. 166 (Filing ID 334147).

³¹³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-12 and MHTO-12 Attachment 1: Memo on Snow Sampling, pp. 41-42 and PDF p. 165 (Filing ID 334147).

³¹⁴ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 39 (Filing ID 337185).

country foods is “negligible”³¹⁵. The impacts from dust have already had a serious impact on harvesting and are at levels that are unacceptable to Inuit.³¹⁶

ii) Baffinland’s Dust Monitoring and Mitigations are Insufficient

395. Baffinland’s monitoring of dust is limited and so far Baffinland has refused to monitor dust below 2 m, despite recommendations by the members of the TEWG.³¹⁷

396. In response to a question from QIA about committing to implement covers on railway cars and perform primary crushing at the Mine Site in an indoor facility, Baffinland does not commit to implement these measures. Instead, Baffinland says that it will undertake an audit to see if those measures are necessary. Inuit are already telling Baffinland that those measures are necessary, but again Baffinland is unwilling to implement recommended mitigations.³¹⁸

397. Baffinland proposes to use dust suppression products, but again these raise concerns about impacts to the environment and human health. Further, as noted above by the Board, the application of dust suppressant products has not successfully reduced dust.

398. Baffinland also relies on the purported dust reduction from the northern railway. However, Baffinland’s estimates are based on an unsupported assumption that the traffic levels on the Tote Road will return to 2014 levels.³¹⁹

399. Baffinland’s approach to ignoring when Inuit thresholds have been reached and undertaking studies to justify not implementing mitigation measures is a worrying trend. Baffinland continues to demonstrate an unwillingness to effectively monitor impacts and adapt its plans to reduce impacts to Inuit. Key information gaps remain with respect to the impacts of dust on harvesting rights, including with respect to the safety of drinking from the land, and the ability to mitigate those impacts.

400. Baffinland has recently committed to support QIA’s independent Inuit led project to understand the impacts of dust. While this commitment is welcome, it comes far too late and does not assist the Board to assess the impacts of dust on harvesting rights and to determine whether they can be mitigated.³²⁰

³¹⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-1, p.3 (Filing ID 334147).

³¹⁶ “... Baffinland's human health risk assessment gave no consideration to the mental stress and anxiety that comes from being hundreds of kilometres from home and not finding any snow or ice that isn't red with dust, but you need to make water for food and drinking.” NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, 1944:12 - 1944:18 (Filing ID 333443) Eric Ootoovak, MHTO.

³¹⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-9, p.8 (Filing ID 334147).

³¹⁸ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-26, pp.27-28 (Filing ID 334147); see also 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-5, pp.36-37 (Filing ID 334147).

³¹⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB, p. 17 (Filing ID 334147).

³²⁰ 2021-10-20 MHTO Ltr to NIRB Re Response on BIM Written Comments, pp. 3-4 (Filing ID 337078); 2021-10-02 BIM Comments and Resp, para.131 (Filing ID 336935).

401. Baffinland has not done the work to understand the current impacts of dust, including for the safety of drinking water, in consultation with affected communities. Baffinland has also not provided complete monitoring plans and adaptive management plans that set out how impacts of dust will be captured and responded to, including an assessment of the effectiveness and feasibility of dust suppression measures. Baffinland has not shown that it can sufficiently prevent, mitigate or manage the impacts of dust on its proposed terms and conditions to support a recommendation of Project approval.

402. If the Project is going to be recommended for approval at this time, contrary to the submissions of MHTO, as dust suppressant measures, MHTO recommends that Baffinland be required to implement covers on railway cars and perform primary crushing at the Mine Site in an indoor facility.

K. FAILURE TO CONSULT ON AND ASSESS ALTERNATIVES FOR THE NORTHERN RAILWAY

403. Baffinland proposes to construct an additional 110 km northern railway with raised bed and track that will bisect MHTO's harvesting area and result in additional linear disturbance in caribou habitat.

404. Baffinland has failed to consult adequately with affected communities about the northern railway and options for the Project. Further, Baffinland has failed to provide an adequate assessment of the feasibility for its new preferred route 3.

1. Failure to Demonstrate Need for Additional Railway

405. As part of the review process, the Board is required to consider the need for the Project; the cumulative ecosystemic and socio-economic impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out; and the options for carrying out the project that are technically and economically feasible and the anticipated ecosystemic and socio-economic impacts of such options.³²¹

406. With respect to the transportation of ore for the Project, Baffinland has failed to provide an adequate assessment with respect to the options that are technically and economically feasible and the anticipated ecosystemic and socio-economic impacts of such options.

407. Further, Baffinland has not provided evidence of sufficient consultation on alternatives, nor has Baffinland provided an accurate – or any – reflection in their Environmental Impact Statement of the concerns raised by MHTO and other Inuit with respect to building a railway on Baffin Island.³²² The Environmental Impact Statement Guidelines provide that:

...the public opinions and preferences shall also be taken into consideration as a criterion in the assessment all the alternative options. Therefore, the alternative analyses shall include a

³²¹ NuPPAA, ss. 103(1)(a), 103(1)(f), 103(1)(m).

³²² 2019-11-26 NIRB Public Hearing Transcripts for November 4, 2019, Vol. 3, pp. 446-8 to 453-7 (Filing ID 327561). Exchange between Amanda Hanson-Main, MHTO and Megan Lord Hoyle, Baffinland.

discussion on how public consultations by the Proponent have influenced the Project planning, and how public preferences have been considered by the Proponent in determining the preferred project alternatives.³²³

408. Given that the preferred means for the Project will have significant impacts for MHTO members (increased shipping, increase port size, railway bisecting harvesting area), it is critical that MHTO members are meaningfully consulted and involved in the assessment of alternative options of carrying out the Project. Baffinland has not provided evidence that MHTO members were consulted and their views considered with respect to the options for the Project.

409. A southern railway has already been approved for the project. Baffinland has not established that the additional northern railway is needed, and MHTO urges the Board to reject Baffinland's argument that they need the additional northern railway because they cannot afford the southern railway. The northern railway will result in a bisecting of the area relied upon for harvesting rights and result in additional disturbance within caribou habitat. Additional shipping along the northern route is also a risk.

410. Before this additional disturbance is visited upon communities, an adequate assessment should be put before the Board justifying the need for the additional railway and assessing options that would potentially reduce the ecosystemic and socio-economic impacts of the Project.

411. In its original submissions for the 2019 hearing, MHTO asked that Baffinland provide detailed alternatives assessments with respect to the options for the Project and the routing for the northern railway.³²⁴ Baffinland has not provided this information.

412. The Board specifically asked Baffinland to provide an assessment of the “[a]lternatives for the routing of the railway and the location of the sea port”, including of “[r]outing the rail line from the Mary River mine site to a seaport on the east coast of Baffin Island”.³²⁵ Baffinland has not provided an adequate alternatives assessment.

413. Baffinland asserts that a railway is required to “ensure the long-term viability” of the Project, but Baffinland does not provide a detailed assessment of the viability of the Project with the southern railway – leaving the Board without the ability to assess whether that is a viable alternative.³²⁶

414. Baffinland notes that “[i]mplementation of the 18 Mtpa South Railway and Steensby Port as authorized under Project Certificate No. 005 is not economically feasible in the short-term, due to its high capital cost, exceeding \$4.1 billion in initial CAPEX (compared to \$1 billion for the 12 Mtpa north rail).”³²⁷ However, the South Railway and Steensby Port “remains an

³²³ 2015-10-06 Amended Environmental Impact Statement Guidelines, PDF p. 32-33 (Filing ID 317361).

³²⁴ 2019-09-23 MHTO Final Written Submissions to NIRB for Baffinland's Phase 2 Proposal, p. 20 (Filing ID 326941).

³²⁵ 2015-10-06 Amended Environmental Impact Statement Guidelines, PDF p. 32 (Filing ID 317361).

³²⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-5(5), p. 36 (Filing ID 334147).

³²⁷ 2018-10-03 TSD 1-Alternatives Analysis Report, PDF p. 10 (Filing ID 320552).

important part of Baffinland's long-term development plan for the Project, as Baffinland seeks to expand to 30 Mtpa to be competitive in the world's iron ore market."³²⁸

415. Baffinland does not provide the Board with detailed financial information to allow the Board to weigh the increased capital costs against increased ecosystemic and socio-economic costs to the environment and treaty rights of approving a northern railway (in addition to the already approved southern railway).³²⁹

416. Further, as highlighted above, Baffinland has not adequately assessed the cumulative impacts of the northern railway in addition to the road and the southern railway in the harvesting area and in caribou habitat. Baffinland downplays the additional ecosystemic and socio-economic impacts caused by the railway and does not adequately account for the impacts of the additional linear disturbance and permanent bisecting of the harvesting area.³³⁰

417. Baffinland notes that one of the reasons that it moved to rail transport is a concern that the "Tote Road has been identified as a barrier to travel that has been impacting land use".³³¹ However, the railway would add an additional barrier to travel for harvesting and for caribou movement, that would be in addition to the Tote Road, permanently affecting land use.³³²

418. Baffinland further notes that the railway would reduce impacts from dust.³³³ Yet, Baffinland has not explored other methods that would reduce impacts from dust that would not result in additional linear disturbance in harvesting areas, including the covering of trucks and performing primary crushing at the Mine Site in an indoor facility. Baffinland has further not adequately demonstrated that the dust generated from rail operations will be significantly less than that from road operations and relies on unsupported assumptions about the use of the Tote Road.³³⁴

419. Baffinland notes that "input on alternatives, particularly Tier 1 alternatives, was derived from community engagement activities such as public meetings and workshop".³³⁵ However, during the segment of the hearings held in 2019, Baffinland admitted that only one workshop was held at which route 3 was mentioned, and that workshop was organized to discuss caribou crossings, not route selection. Only 4 participants from Pond Inlet were in attendance, and all

³²⁸ 2018-10-03 TSD 1-Alternatives Analysis Report, PDF p. 10 (Filing ID 320552).

³²⁹ As required by Article 12, Section 12.2.2 of the Nunavut Agreement.

³³⁰ Considering such impacts is one of the primary functions of the Board under Article 12, Section 12.2.2 of the Nunavut Agreement.

³³¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-5(4), p. 36 (Filing ID 334147).

³³² MHTO members note that caribou avoid even the smallest disturbances such as snowmobile tracks, which suggests that a permanent railway would have devastating long-term effects on the presence of caribou in the Project area. See for example 2019-11-26 NIRB Public Hearing Transcripts for November 5, 2019, Vol. 4, pp. 760-7 to 760-17 (Filing ID 327562). Eric Ootoovak, MHTO.

³³³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-5(4), p. 36 (Filing ID 334147).

³³⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB, p. 17 (Filing ID 334147).

³³⁵ 2018-10-03 TSD 1-Alternatives Analysis Report, PDF p. 5 (Filing ID 320552).

were unaware that Baffinland intended to discuss route alternatives.³³⁶ As such, and as presented to the Board, the impacted communities have serious unresolved concerns about the impacts of the railway, including on caribou and traditional use.³³⁷

420. MHTO has not been provided with full information and meaningfully consulted on the alternatives for the Project and its views incorporated into the alternatives assessment. Baffinland's determinations of acceptability appear to be a subjective determination by Baffinland.

421. Workshops provided by Baffinland have not provided the analysis necessary to compare alternatives and the ecosystemic and socio-economic impacts of such alternatives. Baffinland has not integrated concerns about caribou and the permanent bisecting of harvesting areas into its analysis. Further, Inuit raising concerns about dust is not expressing a preference for a railway that bisects harvesting areas.³³⁸

422. Thus, Baffinland has failed to adequately consider and consult on alternatives for the Project, and failed to provide the Board with the evidence necessary to consider the options for the Project and to determine that the addition of a northern railway is in the regional interest.³³⁹

423. In MHTO's submission, the evidence before the Board demonstrates that the additional northern railway would unduly prejudice harvesting rights and the ecosystemic integrity of the area, and cannot be justified based on the rationale put forward by Baffinland, including the asserted short term economic infeasibility of the southern railway.³⁴⁰

2. Railway Route

424. Baffinland has now indicated that it is proposing to go with route 3 for the railway. However, MHTO remains concerned that the work to understand whether this route is feasible has not been undertaken.³⁴¹

³³⁶ 2019-11-26 NIRB Public Hearing Transcripts for November 4, 2019, Vol. 3, pp. 439-19 to 441-1 (Filing ID 327561). Exchange between Amanda Hanson-Main, MHTO and Megan Lord Hoyle, Baffinland.

³³⁷ NIRB Public Hearing Transcripts for January 28, 2021, Vol. 4, pp. 616:26-617:8 (Filing ID 333448); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1914:21 – 1914:24 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1930:11 – 1930:45 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:2-1934:10 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 2059:5-2059:12 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 2071:11-2071:21 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 2150:2 – 2150:10 (Filing ID 333443); NIRB Public Hearing Transcripts for February 6, 2021, Vol. 12, pp. 2320:14 – 2320:19 (Filing ID 333444).

³³⁸ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-5(4), p. 36 (Filing ID 334147).

³³⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-6, p. 6 (Filing ID 334147); NuPPAA, s. 103(1)(a), (f), (m); Nunavut Agreement, Article 12, s. 12.2.2.

³⁴⁰ NuPPAA, s. 103(1)(b), (c), (g), (i), (m); Nunavut Agreement, s. 12.2.2, 12.5.5(a), (b), (c).

³⁴¹ NuPPAA, s. 103(1)(m).

425. MHTO has also not been meaningfully consulted with respect to route 3. The ICA notes that consultation with respect to route 3 with Pond Inlet remains outstanding.³⁴² This required meaningful consultation has not occurred since the signing of the ICA.

426. In a question to QIA about whether the ICA confirms QIA's support for route 3, QIA denied that is the case and acknowledged that consultation remains outstanding, stating that:

QIA has not stated support for any specific route associated with the Phase 2 Proposal. The ICA acknowledges Baffinland's selection of Route 3 and would require that Baffinland engage with the community of Pond Inlet to find a mutually agreeable solution for the route through the Kanajjuk area.³⁴³

427. MHTO has not been provided with the sufficient information to understand the impacts of route 3 and to justify route 3 as the preferred alternative, so that MHTO can share their views.

428. Baffinland must provide communities with sufficient information on the route alternatives and their impacts, and undertake consultation with the communities after the provision of that information to understand their perspective prior to determination of a preferred route. This information is critical to assessing whether the Project reflects the priorities and values of the residents of the designated area. This remains a gap in Baffinland's assessment.

L. MITIGATION MEASURES HAVE NOT BEEN DEVELOPED

1. Whether the Impacts of the Project can be mitigated is unknown

429. Considerable uncertainty remains in both the efficacy of the mitigations proposed and the ability of current monitoring programs to detect project impacts.³⁴⁴

430. As set out above, Baffinland has not provided the necessary information to understand the extent of the impacts of the Project and developed mitigation measures to address those impacts.

431. Baffinland has not undertaken comprehensive monitoring of the existing project impacts (in combination with other cumulative disturbance) and integrated those effects into its plan for prevention, mitigation and management. This missing information adds considerable uncertainty to Baffinland's ability to address the impacts of the expanded Project.

432. Baffinland plans to deal with the level of uncertainty in its impact assessment through adaptive management. However, Baffinland has not provided complete monitoring plans or adaptive management plans that set out the EWIs, thresholds, and responses, and only plans to

³⁴² 2021-02-02 Inuit Certainty Agreement, ID 8: Rail Alignment, s. 8.1.4 at p. 103 (Filing ID 332869).

³⁴³ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO 14(1), PDF p. 12 (Filing ID 334156).

³⁴⁴ NuPPAA, ss. 103(1)(h), (i), (k).

develop these plans after Project approval. QIA stated in the public hearing that the work to incorporate Inuit objectives, indicators, thresholds, and responses is “zero percent complete”.³⁴⁵

433. Given the high level of uncertainty that remains with Baffinland’s effects assessment, its inability to develop indicators and thresholds for key species in a reasonable period of time, and especially considering the reports of impacts to harvesting rights, it is critical that updated and comprehensive monitoring and adaptive management plans be developed with Inuit input prior to a recommendation on the Project. These plans must include appropriate EWIs, thresholds and triggers, and set out the specific mitigation measures that will be employed should those thresholds be reached.

434. On the information before the Board, Baffinland has not shown that it has the ability to prevent, mitigate and manage the impacts of the Project. As such, a recommendation of Project approval cannot be supported.

2. Baseline data has not been collected and monitoring plans remain undeveloped

435. Baffinland has not collected sufficient baseline data on key species and environmental conditions, both in control sites and affected sites, to facilitate the assessment of change by the Project and consequent triggering of adaptive management thresholds and responses.

436. Baffinland has had seven years to collect this data in advance of applying for the expansion but has failed to do so. Further, Baffinland has not provided a plan that is geared towards collecting comprehensive baseline data going forward.

437. Baffinland was asked a number of questions in the hearing for the Project about how it will separate out the impacts of the Project from other environmental stressors. Without a comprehensive understanding of the state of the environment and key species, Baffinland will have no basis on which to assess the drivers of change and separate out Project impacts.

438. Baffinland wants a “reasonable degree of certainty” for moderate level responses and a high degree of certainty that the Project is causing the effect before a high level response will be triggered.³⁴⁶ However, in order to try to establish such a correlation, comprehensive baseline data needs to be collected to understand current conditions and extensive monitoring must take place of not only species, but their habitat and environmental conditions, to understand long-term trends and the drivers of change.

³⁴⁵ We would estimate that the current work is about 25 percent complete, but the work to incorporate Inuit objectives, indicators, thresholds, and responses is zero percent complete. It was not the Qikiqtani Inuit Association’s intention to have unapproved draft thresholds provided to the Nunavut Impact Review Board record without Inuit input. The Qikiqtani Inuit Association identified a number of concerns, mainly that there was missing information, missing thresholds, and missing predefined responses. The Qikiqtani Inuit Association’s position is that these trigger action response plans are incomplete until Inuit of the impacted communities have provided the proper knowledge into the objectives, indicators, thresholds, and responses. NIRB Public Hearing Transcripts for April 14, 2021, Vol. 15, pp. 2837:4 - 2837:18 (Filing ID 335052) Jared Ottenhof, QIA.

³⁴⁶ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 2(1) Adaptive Management Plan (Revised Draft), ss. 2.2.2 and 2.2.3 at pp. 50-52 (Filing ID 332869).

439. Baffinland has not provided updated monitoring plans for the Project to demonstrate how long-term trends will be captured. For each indicator that is to be relied upon to determine whether a response is warranted, Baffinland should have collected the data so that the Project impacts can be captured.

440. For example, for narwhal, when a moderate risk threshold is reached, for its moderate risk response, Baffinland proposes only at that time to investigate trends over time.³⁴⁷ An understanding of trends over time, based on adequate baseline data and monitoring, is essential for a timely response. These investigations should not be occurring only when a threshold is reached. A comprehensive understanding is needed of the narwhal stock currently, including body condition and cortisol levels, and a comprehensive monitoring program developed to capture and understand any changes.

441. As Baffinland's adaptive management plans are dependent on the ability to detect change, this missing baseline information results in a high level of uncertainty with respect to whether Baffinland will be able to detect and adaptively manage impacts.

3. Early Warning Indicators, Thresholds and Responses have not been developed

442. The original project assessment acknowledged that uncertainty existed and noted that precaution was necessary in carrying out the development. This precaution has not been taken.

443. Baffinland was required pursuant to Terms and Conditions 110, 111, and 112 of the existing project certificate to develop EWIs, thresholds and monitoring protocols to prevent impacts of ship noise on marine mammals in consultation with the MEWG. It has been seven years since Baffinland started shipping and effective EWIs, thresholds and responses have still not been developed and employed for the existing project.

444. In response to a question from the Board, Baffinland complains that no other operator has been required to develop EWIs and monitor against them.³⁴⁸ However, Baffinland fails to appreciate that it is because of the uncertainty that exists with the effects of the existing project and proposed operations that the establishment of these EWIs in conjunction with effective monitoring and response plans is essential.

445. While in certain circumstances it may be acceptable to establish monitoring and response plans after approval, with a Project with such significant unknowns, these plans and their effectiveness in capturing impacts must be considered prior to a recommendation.

446. Baffinland proposes to finalize EWIs, thresholds, responses and monitoring protocols only after Project approval. These critical requirements cannot be deferred for the Project.

³⁴⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits, Attachment 1a MMP TARP and Mitigation Toolkit, PDF p. 280 (Filing ID 334147).

³⁴⁸ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-11, pp.8-9 (Filing ID 334147).

447. Baffinland has developed one EWI related to narwhal – the reduction of 10% of the immature individuals in the population. MHTO, DFO, the MEWG and others have commented on the insufficiency of this indicator and the need to include additional EWIs to understand the impacts on narwhal, such as abundance, cortisol levels and body condition.³⁴⁹ Baffinland has not adopted those recommendations and proposes to only monitor body condition from a distance in 2021.³⁵⁰ Further, this threshold has yet to be incorporated into adaptive management plans and monitoring plans.³⁵¹

448. The inadequacy of this indicator to detect early impacts is evident from the failure to detect the narwhal decline as reported in the 2020 monitoring.³⁵²

449. MHTO further has serious concerns about the manner in which Baffinland intends to monitor body condition from a distance, and questions whether changes will be able to be accurately determined.

450. As part of its response to the written questions at the end of the hearing, Baffinland has provided a package of material as a summary of the work that has been done to date with QIA under the ICA. Included within this package are some proposed initial Objectives, Indicators, Thresholds and Responses (“OITRs”) in the form of Threshold, Action and Response Plans (“TARPs”) and associated Moderate and High Action Mitigation (Response) Toolkits for each of these plans.³⁵³ However, as noted by QIA in response to these materials:³⁵⁴

We would estimate that the current work is about 25 percent complete, but the work to incorporate Inuit objectives, indicators, thresholds, and responses is zero percent complete. It was not the Qikiqtani Inuit Association’s intention to have unapproved draft thresholds provided to the Nunavut Impact Review Board record without Inuit input. The Qikiqtani Inuit Association identified a number of concerns, mainly that there was missing information, missing thresholds, and missing predefined responses. The Qikiqtani Inuit Association’s position is that these trigger action response plans are incomplete until Inuit of the impacted communities have provided the proper knowledge into the objectives, indicators, thresholds, and responses.

³⁴⁹ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO 14(1), PDF p. 25 (Filing ID 334156); 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO 14(7), PDF p. 26 (Filing ID 334156); See also, 2021-09-13 Baffinland Comments and Responses, pp. 29-34, 56-60, 61-64 (Filing ID 336778).

³⁵⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-20, pp. 47-48 (Filing ID 334147); 2021-09-13 Baffinland Preliminary 2020 Narwhal Monitoring Update, PDF p. 20-21 (Filing ID 336783).

³⁵¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-20, p. 48 (Filing ID 334147).

³⁵² 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 38 (Filing ID 337185).

³⁵³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 270 (Filing ID 334147).

³⁵⁴ 2021-04-14 NIRB Public Hearing Transcripts, Vol. 15, pp. 2837:4 - 2837:18 (Filing ID 335052) Jared Ottenhof, QIA.

451. MHTO has not had the opportunity to adequately review these OITRs or TARPs or provide input into their development. Baffinland should have worked to develop these plans, in consultation with Inuit groups, in advance of the Board's hearing.

452. Baffinland acknowledges that these OTIRS are not final and that the work to incorporate Inuit perspectives is not complete. Many of the thresholds and responses remain blank in Baffinland's chart. QIA acknowledges that "[n]o thresholds, triggers and actions have been developed for the CRLU or the Social Stream."³⁵⁵

453. For the EWI and thresholds that have been developed, there are serious concerns about their adequacy. Baffinland has not provided biological data to support its proposed thresholds or developed monitoring protocols that would capture whether the thresholds have been exceeded.

454. For example, for narwhal, the reduction of 10% of the immature individuals in the population "would need to be met alongside corresponding moderate level behavioural responses to be able to effectively correlate this change to Project-related impacts" in order to even trigger a moderate response.³⁵⁶ As set out above, due to fidelity to an area, behavioural responses may be "localized and temporary", while the Project is still having an impact on narwhal. Baffinland's plans do not account for how these impacts would be captured and responded to.

455. For seal, Baffinland proposes a greater than 25% reduction in seal density as an indicator. Baffinland notes in the footnotes that "[t]his indicator would be contingent on running a ringed seal aerial survey program or equivalent", but Baffinland has not developed such a program.³⁵⁷

456. DFO has commented on the difficulty in monitoring for abundance using aerial surveys due to low confidence. A single indicator will not capture the Project impacts on seal. Similar to narwhal, additional indicators such as body condition need to be developed.

457. Thus, the Board is presented with an incomplete draft document that does not reflect Inuit input and that raises serious questions about how impacts will be captured, and responses triggered.

458. For a Project with such a high level of potential impacts, this is unacceptable. The Board should have the opportunity of reviewing a completed adaptive management plan and monitoring plans, which incorporate Inuit input, prior to consideration of a recommendation on the Project. The current plans do not provide assurance that the significant adverse impacts of the Project would be prevented, mitigated, or managed.

³⁵⁵ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO 6(5), PDF p. 20 (Filing ID 334156) (emphasis added).

³⁵⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 280 (Filing ID 334147).

³⁵⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF pp. 281-282 (Filing ID 334147).

4. Level of Certainty Required and Working Group Decision-making

459. Even for the thresholds that have been developed, it is unclear how and when a response will actually be triggered.³⁵⁸

460. Baffinland wants a high level of certainty with respect to the linkages to the Project before a high-level response will be triggered. This level of certainty is inappropriate, particularly as Baffinland has not developed programs to monitor all factors necessary to draw a link with the Project.

461. One of the major issues with the functionality of the current working groups is the lack of timely and transparent responses from Baffinland with respect to observed impacts.³⁵⁹

462. In the 2019-2020 Annual Monitoring Report for the Project, the Board has acknowledged the disfunction of the working groups as follows:

Baffinland is required pursuant to Terms and Conditions 49 and 77 of the Mary River Project Certificate to establish a Marine Environment Working Group (MEWG) and Terrestrial Environment Monitoring Group (TEWG) to consult and advise on the monitoring programs of the Project. At the request of group members, the NIRB has participated as an observer in working group meetings since 2018 and has noted the ongoing concerns among group members. As a result of efficacy concerns, the GN has led the process of revising the Terms of Reference for these groups through consultation with all group members, these Terms of Reference are expected to be finalized in 2021.³⁶⁰

463. Inuit concerns are recorded in meetings with Baffinland, but often do not result in changes to the project. Baffinland has required that IQ be “corroborated by data” in order to consider implementing change for the Project.³⁶¹

464. Baffinland’s general reasons for not implementing recommendations by the working groups include: “suggestions or recommendations which are broad/sweeping in nature and do not necessarily reflect 1) the parties’ mandates or expertise; 2) evidence or rationale to support the request or modification or 3) offers solutions or suggestions that would aid Baffinland in responding to the request.”³⁶²

³⁵⁸ There are some mitigation measures that are being proposed for Phase 2, but they're largely unproven. We don't know if they're going to work. Qikiqtani Inuit Association has proposed different solutions and ways to push for more Inuit involvement in project decision-making, including the formation of a committee to effect real change at the project, mostly because the current working groups are not as effective as we would like them to be. NIRB Public Hearing Transcripts for April 13, 2021, Vol. 14, pp. 2720:25 - 2721:7 (Filing ID 335047) Jared Ottenhof, QIA.

³⁵⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-79, p. 15 (Filing ID 334147).

³⁶⁰ 2020-12-23 Nunavut Impact Review Board 2019-2020 Annual Monitoring Report, The Mary River Project, p. 41 (Filing ID 332232).

³⁶¹ 2021-01-18 MHTO Supplemental Final Written Submissions to NIRB for Baffinland’s Phase 2 Proposal, p. 15 (Filing ID 332619).

³⁶² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-79, p. 16 (Filing ID 334147).

465. Baffinland often does not provide a particular reason for not adopting a recommendation. This lack of transparency that is still ongoing was recognized by the Board in the 2020-2021 Annual Report as follows:

An example of the lack of transparency was provided by Fisheries and Oceans Canada when commenting on Baffinland's Technical Memo Re: Preliminary Summary of 2020 Narwhal Monitoring Programs. On May 13, 2021 MEWG members were presented five (5) mitigation options during a teleconference and informed that one (1) would be selected by Baffinland. After the teleconference there were no further opportunities for discussion around which of these mitigation options the group recommended. Either an indication of how information would be brought to the MEWG at the end of the monitoring year to assess if the mitigation option was effective or if other options were available. At the end of the teleconference, Parties were unaware of which mitigation option was expected to be implemented and expressed concerns around this process.³⁶³

466. The dysfunction of the working groups means that MHTO is often left not knowing what steps, if any, will be taken to protect their harvesting rights. The commitments provided by Baffinland in the hearing do not provide any assurance that there is a clear path forward to address the dysfunction of the working groups for the Project.³⁶⁴

467. Baffinland is proposing a high level of certainty that the Project is reasonably associated with the effect and that the action is reasonably likely to reverse these effects before implementing a response. As part of the draft adaptive management plan, Baffinland indicated that in-order to implement a "high action level response", one that could impact the "scope, scale and viability of the Project", a high degree of certainty that the Project is reasonably associated with the effect and that the response has a reasonable likelihood of reversing the effect is required.³⁶⁵ Baffinland confirmed in response to the Government of Nunavut that this standard would apply across the Project.³⁶⁶

468. However, as noted above, Baffinland has not collected baseline data or developed monitoring programs that would yield such certainty. Further, Baffinland has not undertaken the studies to show that proposed responses will have "a reasonable likelihood of reversing the effect". DFO raises this issue with respect to Baffinland's proposed responses to the decline in narwhal abundance lacking biological support. These gaps need to be filled prior to a recommendation on the Project.

469. MHTO is critically concerned that when impacts are observed Baffinland will still say there is not sufficient data to link them to the Project – without having undertaken the efforts to collect that data.

³⁶³ 2021-10-17 Nunavut Impact Review Board 2020-2021 Annual Monitoring Report, The Mary River Project, p. 37 (Filing ID 337185).

³⁶⁴ 2021-10-02 BIM Comments and Resp, para. 81 (Filing ID 336778).

³⁶⁵ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 2(1) Adaptive Management Plan (Revised Draft), ss. 2.2.3 at p. 52 (Filing ID 332869).

³⁶⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to GN-3, PDF p. 68 (Filing ID 334147).

470. The Government of Nunavut targets this issue in a question to Baffinland asking them to “list the monitoring programs for caribou that will yield sufficient data to provide this level of certainty”. In response, Baffinland does not point to any planned long-term, continuous monitoring that it is going to undertake for caribou to understand the impacts of the Project sufficiently to establish a high level of certainty, including understanding whether caribou movement patterns are changing.³⁶⁷ Baffinland merely notes its support for general, intermittent monitoring undertaken by the Government of Nunavut and its aerial surveys, which have a low confidence rating. Currently, there is no final agreement for information sharing and research, and the agreement in principle does not provide details on any research to be undertaken and whether it will focus on understanding project impacts, or whether any of the data will be provided to MHTO.³⁶⁸

471. Baffinland’s latest proposal is that where there is not a consensus on a recommendation or where it does not agree with a recommendation of the working groups it will go to the Board for consideration in the annual report.³⁶⁹ While having some Board oversight of Baffinland’s refusal to implement recommendations of the working groups is positive, little information is provided on how this process will work and whether Inuit groups will have the opportunity to put forward their views on why a recommendation should be implemented to the Board.

472. Further, only having recommendations go to the Board in the annual report could result in considerable delay in addressing the impacts of the Project. MHTO recommends that the terms of reference for the working groups and the process of bringing a matter to be decided by the Board be finalized and agreed upon by the working group prior to a recommendation on the Project. This information is key to understanding the level of oversight and input that will be put into place for Baffinland’s activities.

5. Effectiveness of Mitigation Measures has not been Proven

473. Even where measures have been developed (even minimally), Baffinland has not proven the effectiveness of the mitigation and adaptive management measures proposed to mitigate and manage impacts, including to critical species such as narwhal, caribou and seal.

474. In its responses to written questions provided at the end of the hearing, Baffinland provided a draft “pool” of proposed mitigations for discussions with Inuit, and that could be implemented should respective moderate or high action level thresholds be exceeded. Prior to finalization, these “pools” of mitigations, referred to by Baffinland as “Moderate and High Action Toolkits”, are expected to be subject to further review and categorization (moderate versus high, or both at different scales).³⁷⁰

³⁶⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to GN-3, PDF p. 68 (Filing ID 334147).

³⁶⁸ 2021-11-04 Agreement in Principle GN-BIMC (Filing ID 337254).

³⁶⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-79 and Attachment 4 – October 2020 Working Group Terms of Reference Update, p. 16 and PDF p.326 (Filing ID 334147).

³⁷⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, p. 2 (PDF p. 272) (Filing ID 334147).

475. However, whether these measures will in fact reduce impacts, if implemented, has not been tested before the Board. If Baffinland is going to rely on adaptive management to deal with the uncertainty in its effects assessment, it must show that there are adaptive management strategies developed that can be implemented quickly and effectively to mitigate impacts if they exceed predictions. Baffinland has failed to do so.

476. This is particularly concerning because Inuit have already observed adverse impacts from the Project that have exceeded Baffinland's original predictions and Baffinland has failed to initiate an effective response. MHTO was not consulted with respect to Baffinland's toolkit and has not had the opportunity to share its views on the effectiveness of the proposed mitigations.

477. There are significant information gaps with respect to the efficacy of the proposed tools. For example, if a response is triggered, Baffinland proposes implementing vessel convoy requirements as a mitigation measure for impacts to marine mammals. However, Baffinland has not investigated whether it is feasible to implement this measure with vessel operators, and whether it will in fact reduce impacts to have vessels travel in convoys, which may decrease the frequency of acoustic disturbance, but would increase the magnitude of acoustic disturbance when vessels are travelling through critical habitat and the time that vessels are idling/anchored in the area.³⁷¹

478. Baffinland further proposed to "[m]odify vessel mix (e.g. vessel sizes) according to market availability".³⁷² However, whether that is possible based on the current availability of vessels, and whether it would actually reduce impacts to have smaller vessels more frequently travelling through narwhal and seal habitat, has not been considered.

479. In response to a question about the noise abatement measures that are available for vessels, Baffinland notes it is continuing to investigate potential noise abatement measures for the icebreaker.³⁷³ The outcomes of this investigation are to be presented to the MEWG. There is no evidence that the technology to make the icebreaker quieter is available and able to be implemented for the Project. Baffinland did not engage in 2021 early season icebreaking due to the impacts of shipping at the current levels, and has not shown increased marine shipping levels could be mitigated.

480. Baffinland further proposes as a mitigation measure for impacts to marine mammals of a permanent shift in the established shipping route through Eclipse Sound and Milne Inlet to avoid sensitive areas. However, an alternate route has not been put forward for consideration and, if such a route is available, MHTO questions why Baffinland has not implemented it for the Project.³⁷⁴

³⁷¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 285 (Filing ID 334147).

³⁷² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 285 (Filing ID 334147).

³⁷³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-11, p.22 (Filing ID 334147).

³⁷⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 285 (Filing ID 334147).

481. For terrestrial impacts, Baffinland proposes rail covers to mitigate the impacts of dust. However, in response to a question from QIA about implementing rail covers, Baffinland argues against the use of rail covers as a feasible mitigation measure. Baffinland notes that rail covers would result in additional road and track infrastructure to enable personnel to access the trains to perform this additional function; introduce additional safety risks to personnel who would be required to remove and reinstall covers during periods of darkness and extreme cold temperatures; and increase the number of train sets and quantities of rolling stock (locomotives and rail cars) and potentially the number of sidings required to successfully transport 12 Mtpa of iron ore.³⁷⁵

482. For impacts to caribou, Baffinland proposes to increase “caribou crossings”. However, Baffinland does not have any tools in its toolbox if caribou avoid the railway altogether and do not use the “caribou crossings”.³⁷⁶ Indeed, the fact that there has only been 1 caribou sighted crossing the Tote Road, which has a lesser grade, strongly suggests that increased “caribou crossings” on a more significant grade will be of little assistance. Baffinland has not provided sufficient support to establish that caribou will utilize caribou crossings, as opposed to avoiding the railway altogether, given their sensitivity to industrial disturbance.

483. These examples provide an illustration of the missing information with respect to the mitigation measures for the Project. If Baffinland is going to rely on adaptive management, it must be known in advance of a recommendation on the Project that there are effective measures that can be put into place to mitigate and manage impacts. This is particularly so as Baffinland requires proof that the “response has a reasonable likelihood of reversing the effect” prior to implementing high level action responses.

484. In the result, Baffinland has not shown that it can prevent, manage and mitigate the impacts of the Project.

6. The Inuit Certainty Agreement does not Provide Certainty that Effective Mitigation Measures will be Developed

i) Work under the Inuit Certainty Agreement is incomplete and does not address outstanding concerns

485. The majority of the work agreed to between the parties under the ICA is incomplete or has not even begun. The ICA at this stage is nothing more than an agreement to make (or arbitrate) a plan – the plan itself remains to be developed.³⁷⁷

³⁷⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: QIA 26 Attachment 1: North Railway – Rail Car Covers, PDF pp. 134-135 (Filing ID 334147); 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 295 (Filing ID 334147).

³⁷⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 295 (Filing ID 334147).

³⁷⁷ “So the hamlet's concern and its problem just coming out and supporting the Inuit Certainty Agreement is associated with the fact that we have before us and the Board has before it the skeleton, and the lack of detail in relationship to that is of concern not just to the MHTO but of considerable concern to the hamlet.” NIRB Public

486. QIA acknowledges that the ICA currently does not address impacted communities' concerns:

Based on the evidence in the September 2020 and January 2021 phases of the Public Hearing, it was clear that the proposed IC, ISP, ISOC, CRLU Study and AMP all require further input from the impacted communities before they are acceptable as meaningful mechanisms to address impacts on Inuit rights. The proposed changes to Inuit-led monitoring (through the proposed IC, ISP, ISOC, further CRLU studies and AMP), do not yet adequately address the scope of the concerns raised by the impacted communities regarding the effects of the proposed project and whether these effects can be adequately monitored, mitigated or managed.³⁷⁸

487. These structures do not address MHTO's concerns and, as has been submitted to the Board, MHTO is of the view that QIA did not have adequate community consensus to sign the ICA.³⁷⁹

488. Due to the lack of progress with Baffinland, QIA has determined that it cannot support the Project as follows:

After numerous technical meetings, three phases of public hearing to date, and extension engagement with Baffinland and the impacted communities, QIA determined (with a Board decision on March 5, 2021) that it cannot support Phase 2 because of the magnitude of still-unknown impacts combined with the lack of consensus about proposed Inuit-led monitoring and environmental decision-making structures that could assist in better understanding and addressing these impacts.³⁸⁰

489. MHTO asked a series of questions of QIA about the status of the various initiatives under the ICA, including the Inuit Stewardship Plan, Inuit Committee and Adaptive Management Plan, and the consistent response was that they have not been developed or would only be finalized after Project approval.³⁸¹ If the parties are not able to agree on the completion or

Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1976:8 - 1976:13 (Filing ID) Frank Tester, Hamlet of Pond Inlet.

"However, without knowing whether the proponent or Inuit would have ultimate control for deciding when corrective actions are required and therefore to be taken, the clarity required to ensure that the constitutionally protected harvesting rights of Inuit are protected is missing. // Despite having more than seven months since the signing of the Inuit Certainty Agreement to develop the details regarding how the Inuit stewardship plan would work, the proponent and the Qikiqtani Inuit Association have failed to finalize these critical details. In the absence of these key details, the so-called Inuit Certainty Agreement provides no certainty for Inuit." NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 2043:23 - 2044:2 // 2044:14 - 2044:21 (Filing ID 333443) Louis Primeau, Hamlet of Sanirajak.

³⁷⁸ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to NIRB-87, PDF p. 32-33 (Filing ID 334156); see also 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-4, PDF p. 13 (Filing ID 334156); see also 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(1), PDF p. 14 (Filing ID 334156).

³⁷⁹ 2021-02-02 Inuit Certainty Agreement: Article Seven Communications and Announcements, s. 7.3 at p.10 (Filing ID 332869).

³⁸⁰ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-4, PDF p. 14 (Filing ID 334156) (emphasis added); 2021-02-02 Inuit Certainty Agreement: Article Five NIRB Regulatory Issues and Resolution of QIA Technical Comments, s.5.6 at p.7 (Filing ID 332869).

³⁸¹ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(3), MHTO-5(2), and MHTO-5(5), PDF p. 15 (Filing ID 334156); 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-6(4), PDF pp. 19-20 (Filing ID 334156).

implementation of any matter set out in Schedule A to the ICA, the matter must go to arbitration.³⁸²

490. The current Project proposal does not provide the Board with the assurance needed that impacts to Inuit treaty rights have been adequately and accurately assessed, and can be monitored, mitigated and managed. Further, considerable work is needed to ensure that Inuit will have a meaningful role in monitoring and adaptive management decisions.³⁸³ The ICA has not addressed the significant information gaps that remain with respect to Project impacts, monitoring, mitigations and decision-making.

491. Prior to a recommendation on the Project, the work needs to be undertaken to understand the impacts of the Project on Inuit treaty rights and how those impacts will be monitored, mitigated and managed.

ii) Deferral of Collecting Essential Information

492. Over the seven years of operations of the project, Baffinland has not monitored impacts to Inuit treaty rights or assessed changes that have occurred since the commencement of the project from an Inuit perspective. The impacted communities have raised concerns about the underestimation of impacts by Baffinland and the significant adverse impacts on treaty rights from the existing project.³⁸⁴

493. The ICA provides for a Culture, Resources and Land Use (“CRLU”) Assessment and Food Security Assessment.³⁸⁵ These studies were necessary due to the lack of Inuit involvement with the assessments undertaken by Baffinland and the disagreement of Inuit with the credibility of and the conclusions in Baffinland’s assessments.³⁸⁶ These studies are proposed but have not yet been completed.³⁸⁷ These studies should be completed prior to making a recommendation on the Phase 2 Project.

494. The ICA at ID 6, Section 6.1.1 recognizes that:

³⁸² 2021-02-02 Inuit Certainty Agreement: Article One Agreed Terms and Conditions, s.1.2 at p.2 (Filing ID 332869).

³⁸³ The Inuit Certainty Agreement also says that we will need more certainty that the impacts are from the project before they'll take adaptive management measures. I think this is very dismissive of our Inuit Qaujimajatuqangit. And this is one of many reasons we don't support the Inuit Certainty Agreement as written. We have no idea those adaptive management measures are for most species. The adaptive management plan is basically blank when it comes to the details. Baffinland said they left it without details to accommodate us. That is not what Inuit want. This is an unacceptable level of uncertainty we are left with. NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1945:23 - 1946:9 (Filing ID 333443) Eric Ootoovak, MHTO.

³⁸⁴ 2021-01-18 MHTO Supplemental Final Written Submissions to NIRB for Baffinland’s Phase 2 Proposal (Filing ID 332619).

³⁸⁵ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 6 Phase 2 Culture, Resources and Land Use (CRLU) Assessment and ID 7 Pond Inlet Country Food Baseline, p.90 and p.101 (Filing ID 332869).

³⁸⁶ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 6 Phase 2 Culture, Resources and Land Use (CRLU) Assessment, ss. 6.1.1, 6.1.3, 6.1.7 at p.101 (Filing ID 332869).

³⁸⁷ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(16), PDF p. 18 (Filing ID 334156); 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-9(4), PDF p. 22 (Filing ID 334156).

There are concerns that Baffinland's Final Environmental Impact Statement (FEIS) underestimated impacts to Culture, Resources and Land Use (CRLU) as the conclusions have been deemed by the Inuit parties to have been derived without the desired level of Inuit input. QIA and the North Baffin communities have not found Baffinland's current findings credible. Inuit are already observing changes from the Mary River Project and Phase 2 will result in more changes.

495. And at ID 6, Section 6.1.3 states that:

A Phase 2 CRLU Assessment with meaningful input from Inuit helps to provide an evaluation of project impacts, integration of Inuit Qaujimajatuqangit, and better protections for QIA and community CRLU. Joint analysis of impacts to CRLU will also inform monitoring and management of impacts on CRLU.

496. And at ID 6, Section 6.1.4 states that:

It is agreed that one of the primary purposes of the Phase 2 CRLU Assessment is to reflect Inuit views on effects estimations and significance determinations in relation to the Phase 2 Proposal in addition to what has been presented in Technical Supporting Document 25 (TSD-25) of the Phase 2 FEIS Addendum. It is expected that this work will result in modifications and additions to mitigation, monitoring, adaptive management, and, compensation measures.

497. As acknowledged by QIA, "further CRLU assessment work is necessary before any project approval, given critical IQ gaps in the existing impact assessment."³⁸⁸ The milestones in the CRLU Assessment Work Plan have not been achieved.³⁸⁹

498. With respect to MHTO particularly, QIA states that:

The design of CRLU assessment work is ongoing. QIA has been working with the community of Mittimatalik to gather initial information to inform the design of the program. Through ongoing engagement, QIA aims to build on our relationship with the MHTO, the Hamlet of Pond Inlet and Mittimatalingmiut to ensure that adequate CRLU assessment is conducted. There is no CRLU monitoring in place for either the existing or proposed phases of the Mary River Mine. Any plans for CRLU monitoring would necessarily involve input and participation of Mittimatalingmiut.³⁹⁰

499. QIA "is not satisfied that the current or proposed AMP will provide the necessary safeguards if production increases, given the lack of sufficient baseline data and insufficient integration of IQ evidence regarding existing environmental conditions."³⁹¹

500. QIA has done some work to collect baseline information on treaty rights in the Tusaqtavut studies. However, QIA "continues to assert that impacts to Culture, Resources and

³⁸⁸ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(8), PDF p. 16 (Filing ID 334156).

³⁸⁹ 2021-02-02 Inuit Certainty Agreement: Schedule A Appendix ID 6(1) Joint Phase 2 CRLU Assessment Work Plan, p.96 (Filing ID 332869).

³⁹⁰ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(10), PDF pp. 16-17 (Filing ID 334156).

³⁹¹ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-10(3), PDF p. 23 (Filing ID 334156).

Land Use (CRLU) have been inadequately assessed to date (and more study is required), and that in addition, mechanisms must be put in place for proper CRLU impacts monitoring.”³⁹²

501. The Tusaqtavut Study provides the perspectives of the 35 individuals interviewed on Inuit land use and values, and the changes that Inuit have observed with the current project activities. The study was necessary due to the “lack of extensive, up-to-date, and detailed information gathered from Inuit by the Proponent”.³⁹³ The covering letter notes the inadequacy of IQ collection as follows:

it was largely self-directed and controlled by the Proponent; the data is out-dated (especially in light of its relative age and the altered state of the Project components since the data was gathered); and the coarse scale of the mapping and infrequent use of individual interviews without any incorporation of the ongoing use of IQ in community based monitoring provides limited value.³⁹⁴

502. The study reveals that Baffinland may have underestimated impacts from the Project.³⁹⁵ The Tusaqtavut Study does not constitute a “full effects characterization”.³⁹⁶

503. The study recommends a full “[a]ssessment 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.”³⁹⁷ This still remains outstanding for the Project. Baffinland has not properly collected or integrated IQ in the study in an update to its impact assessment.³⁹⁸

504. Having an accurate understanding of the impacts of the Project on Inuit treaty rights is information that is essential to the Board fulfilling its mandate, and to discharging the duty to consult Inuit groups. The fact that Baffinland has not put complete information before the Board on these matters that incorporates IQ undermines the Board’s review.

505. While it may be appropriate to collect certain information after approval, information that goes to the core of the recommendation that the Board is tasked with making cannot be deferred. If additional information is revealed that the impacts of the Project will be significant

³⁹² 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-9(4), PDF p. 22 (Filing ID 334156).

³⁹³ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 2-3 (Filing ID 325448).

³⁹⁴ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 2-3 (Filing ID 325448).

³⁹⁵ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 3-4 (Filing ID 325448).

³⁹⁶ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 3, 5 (Filing ID 325448).

³⁹⁷ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, p. 5 (Filing ID 325448).

³⁹⁸ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-3(2), PDF p.13 (Filing ID 334156); 2021-02-02 Inuit Certainty Agreement: Schedule A ID 6 Phase 2 Culture, Resources and Land Use (CRLU) Assessment, ss. 6.1.7 at p.101 (Filing ID 332869).

to treaty rights (as reported by Inuit), the Board will have already approved irreversible impacts to Inuit.

506. The information put to the Board by MHTO and other Inuit groups is that the current Project has had a significant adverse impact on treaty rights. Baffinland has not monitored these impacts or incorporated them into the significance determination for the Project. Instead, Baffinland relies on outdated predictions with respect to effects in its assessment that are not based on monitoring.

507. A comprehensive assessment of the impacts of the Project on individual Inuit groups treaty rights remains outstanding. The only evidence that the Board has before it with respect to the actual impacts of project activities (that are proposed to be significantly expanded) is from Inuit stating that those impacts are already significant, and have not been mitigated or managed. The Board does not have information before it that the impacts of the expanded operations for the Project can be mitigated and managed.

iii) Adaptive Management Decision-making under the ICA is Unclear

508. The ICA provides QIA the right to approve the adaptive management plan.³⁹⁹ However, the adaptive management plan is yet to be finalized and much uncertainty remains in relation to how Inuit perspectives will be incorporated, how decisions will be made with respect to adaptive management, what criteria those decisions will be based upon (indicators, thresholds, monitoring) and who is making those decisions.⁴⁰⁰ The answers to these questions are critical to understanding whether impacts of the Project can be adaptively managed.

509. It is unclear how Inuit-developed thresholds and monitoring will interact with Baffinland's thresholds and monitoring and who will be the final decision-maker in terms of whether a response is required and what that response will be. Baffinland's draft OITRs and TARPs provide for a great deal of discretion in implementation with little information on how those decisions will be made, what information those decisions will be based upon and who will be making those decisions. Inuit indicators, thresholds and responses have yet to be developed.

510. Broadly, QIA acknowledges the following adaptive management issues as outstanding:

(1) the process for establishing a structure for adaptive management which ensures Inuit-led decision-making, (2) the determination of numerous 'thresholds' which would trigger responses (and which must include Inuit in their definition including based on IQ; and (3) the specific related environmental plans, which are normally finalized from original draft form after the approval in an environmental assessment process in order to reflect hearing decisions.⁴⁰¹

³⁹⁹ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 2 Adaptive Management Plans Approval, ss. 2.1.18 at p.24 (Filing ID 332869).

⁴⁰⁰ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(5), PDF p. 15 (Filing ID 334156).

⁴⁰¹ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(6), PDF p. 16 (Filing ID 334156).

511. As set out above, the main drivers of adaptive management – indicators, thresholds and responses – have not been completed with Inuit input incorporated. Also, missing is information on how Inuit input will be incorporated and translated into adaptive management action. In other words, the substance of adaptive management is missing.⁴⁰²

512. Monitoring plans have also not been finalized. The ICA provides for the establishment of the Inuit Stewardship Plan to provide for Inuit led monitoring.⁴⁰³ However, how this monitoring will be integrated into the adaptive management plan for the Project is still to be determined.⁴⁰⁴ For example, it is a live question whether Inuit monitoring indicates a threshold is exceeded, whether that is sufficient to trigger a mitigation measure being put into place or whether Baffinland will require “corroboration” by its own monitoring and investigation.

513. Ocean’s North asked Baffinland “[i]f a threshold is triggered through Inuit-led monitoring, will action be taken right away, and will Baffinland need to investigate the triggering of this threshold prior to taking adaptive management action”. However, Baffinland did not directly answer the question about immediate action and instead referred back to the adaptive management plan, which does not yet include an Inuit perspective. Baffinland notes that “[i]f Inuit led monitoring indicates an Inuit threshold has been triggered, the responses will depend on the circumstances, but a combined investigation and action would be an option.”⁴⁰⁵

514. With respect to decision-making, Baffinland notes that it must implement recommendations by the Inuit Committee that fall within the scope of the adaptive management plan or QIA can take Baffinland to arbitration.⁴⁰⁶ However, what falls within the scope of the adaptive management plan and what is required to be done under the adaptive management plan requires considerable judgment and has yet to be determined.

515. Implementation is the key to how impacts will be managed, if it is possible to do so; yet it seems that Inuit groups will have very little input into implementation.⁴⁰⁷ The ICA has not defined a role for Inuit decision-making and “input” on changes to the Project to address

⁴⁰² It's taken six years to get here. I can't confirm that we would get them done in three years. I think it's quite apparent that Baffinland has lost the community's trust, and it's difficult to work with community knowledge holders on a project that's not supported as well. Having that level of interaction and engagement is often difficult to manage to get the results that Baffinland would need to have a successful adaptive management plan. So to say that they can definitely be accomplished, I couldn't say that. And, again, we would want to see these objectives, indicators, thresholds, and responses in action with several years of data being collected prior to any sort of project expansion to show that what the communities have said and what western science says actually matches what's being predicted for the project. NIRB Public Hearing Transcripts for April 14, 2021, Vol. 15, pp. 2957:18 - 2958:8 (Filing ID 335052) Jared Ottenhof, QIA.

⁴⁰³ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 1 Inuit Committee and Inuit Stewardship Program, p.17 (Filing ID 332869).

⁴⁰⁴ 2021-02-02 Inuit Certainty Agreement: Schedule A ID 1 Inuit Committee and Inuit Stewardship Program, s. 1.1.3 at p.17 (Filing ID 332869).

⁴⁰⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to ON-3, PDF p. 77 (Filing ID 334147).

⁴⁰⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to NIRB-79, pp. 16-17 (Filing ID 334147).

⁴⁰⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 321 (Filing ID 334147).

impacts seems to be limited to the same role that MHTO has been playing on the working groups – where Baffinland presents options then proceeds to do what it wants.⁴⁰⁸

516. QIA – a party to the agreement – still has key questions outstanding on how the adaptive management plan will work in practice. QIA asks “[s]hould Inuit indicate a reduction in shipping is a required response at a lower impact threshold than Baffinland proposes, how will these differences be dealt with in the updated project management system?”. In its response, Baffinland again does not answer the question, saying that “[t]he rationale for joint agreement on the Adaptive Management plan is to avoid the circumstance which is being referred to in the question.”⁴⁰⁹

517. Yet, agreement on the plan will not dictate the outcome. Whether a threshold is triggered, and what monitoring it is based on, requires considerable judgment. Further, where a threshold is triggered, considerable judgment is required in determining the response.⁴¹⁰

518. In its current state, the ICA and the draft adaptive management plan do not ensure that impacted communities’ perspectives and decisions are incorporated into the response, including determining when a reduction in shipping is required. The main concern with existing operations is that observed impacts have not led to adequate responses, including changes to the project (see discussion on the MEWG). The ICA has not addressed this.⁴¹¹

519. How the Inuit Committee under the ICA interacts with the working groups has also yet to be determined.⁴¹² The Inuit Committee has not yet been formed.⁴¹³ QIA proposes that members of the Inuit Committee chair working group meetings, but Baffinland does not accept this proposal noting that “the QIA is still advancing the formation of the Inuit Committee or a Terms of Reference for the Inuit Committee, and therefore it may be premature to make the commitment to have Inuit Committee members chair the Working Groups without first completing those procedural steps.”⁴¹⁴ Baffinland limits the Inuit Committee to a monitoring role.⁴¹⁵

⁴⁰⁸ 2021-10-02 BIM Comments and Resp, para. 90 (Filing ID 336778).

⁴⁰⁹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-29, PDF p. 28 (Filing ID 334147).

⁴¹⁰ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p.77 (Filing ID 334147).

⁴¹¹ “If we proceeded with the plan you just described, Inuit bear all of the risk.· Many of the impact pathways end at the doorsteps of Inuit on food security -- or food insecurity, effects on Inuit culture and traditional way of life.· Baffinland gets a 12-million-tonne project, while Inuit experience the effects without proven mitigations.” NIRB Public Hearing Transcripts for April 14, 2021, Vol. 15, pp. 2950:23 - 2951:3 (Filing ID 335052) Jared Ottenhof, QIA.

⁴¹² 2021-10-02 BIM Comments and Resp, para. 91 (Filing ID 336778).

⁴¹³ 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to MHTO-5(2), PDF p.15 (Filing ID 334156).

⁴¹⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to QIA-27, p. 28 (Filing ID 334147); 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to GN-4, PDF p. 69 (Filing ID 334147); 2021-03-22 Qikiqtani Inuit Association Responses to Technical Questions: response to GN-4, PDF pp. 8-9 (Filing ID 334156).

⁴¹⁵ 2021-10-02 BIM Comments and Resp, para. 91 (Filing ID 336778).

520. Instead, Baffinland proposes that working group recommendations go first to the Inuit Committee before going to Baffinland.⁴¹⁶ How these groups interact and their ability to make decisions on the response required is critical to the functioning of adaptive management; yet, considerable uncertainty remains.

521. With respect to adaptive management decision-making, Baffinland's flow chart has the potential for a recommendation to go to both the Board and arbitration with QIA, with potentially conflicting decisions.⁴¹⁷

522. There are still significant unknowns with respect to the ability to address the impacts of the Project on treaty rights and how the Inuit perspective will be incorporated into adaptive management decision-making if impacts exceed predictions. The ICA is nothing more than an agreement to make a plan (or arbitrate a plan) – the plan must be developed sufficiently to provide assurance that impacts to treaty rights can be mitigated and managed, and communities protected prior to a recommendation on the Project. This has not happened.

M. TRANSBOUNDARY IMPACTS AND ESPOO EVIDENCE

523. The Espoo Convention is a legally binding treaty to which Canada is a party. It sets out the obligations of parties to carry out Environmental Impact Assessments and to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.⁴¹⁸

524. In its Procedural Guidance, NIRB indicated that the espoo materials are relevant to the Board's considerations of the potential for ecosystemic transboundary effects in the marine environment.⁴¹⁹

525. The materials include letters from Greenland's Ministry of Agriculture and Environment;⁴²⁰ the Ministry of Fisheries and Hunting;⁴²¹ Qeqqata Kommunia;⁴²² the Association of Fishers & Hunters in Greenland;⁴²³ Greenland's Institute of Natural

⁴¹⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF pp.319-320 (Filing ID 334147).

⁴¹⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 319 (Filing ID 334147) 2021-10-02 BIM Comments and Resp, paras. 101-102 (Filing ID 336778).

⁴¹⁸ The Convention regarding the Environmental Impact Assessment in a Transboundary Context, February 25, 1991, available at [https://unece.org/fileadmin/DAM/env/eia/eia.htm#:~:text=Convention%20on%20Environmental%20Impact%20Assessment%20in%20a%20Transboundary%20Context%20\(Espoo.an%20early%20stage%20of%20planning.](https://unece.org/fileadmin/DAM/env/eia/eia.htm#:~:text=Convention%20on%20Environmental%20Impact%20Assessment%20in%20a%20Transboundary%20Context%20(Espoo.an%20early%20stage%20of%20planning.)

⁴¹⁹ 2021-11-30 NIRB Ltr Parties Re Objections, Updated Proc Guidance (Filing ID 337478).

⁴²⁰ 2021-11-01 Gov of Greenland – Agriculture, Self-Sufficiency, Energy and Environment Resp. to Espoo (Filing ID 337225).

⁴²¹ 2021-11-01 Ministry of Fisheries and Hunting Response to Espoo Report (Filing ID 337222).

⁴²² 2021-11-01 Qeqqata Municipality Response to Espoo Report (Filing ID 337223).

⁴²³ 2021-11-01 Fisheries and Hunting Association of Fishers and Hunters in Greenland (Filing ID 337229).

Resources;⁴²⁴ Oceans North;⁴²⁵ the World Wildlife Federation;⁴²⁶ and the Greenland Business Association (collectively, the “Espoo Evidence”).⁴²⁷

526. The Espoo Evidence describes potential transboundary impacts and sets out the insufficiency of Baffinland’s Espoo Report and risk assessment, which does not adequately address the transboundary impacts of the Project.⁴²⁸ Further, the evidence suggests that adequate consultation has not been carried out.

527. Part 11 of Article 12 of the Nunavut Agreement requires the review of transboundary impacts for development projects in Nunavut. The NIRB also has obligations under the NuPPAA to consider transboundary impacts.⁴²⁹

528. Given the limited assessment of transboundary impacts during NIRB’s process, as demonstrated by the Espoo Evidence, the thresholds to meet these obligations have not been met. It is clear from the Espoo Evidence that, should NIRB or the responsible federal minister approve the Project, transboundary impacts will not have been reasonably considered.

529. The Espoo Evidence identifies the inadequacy of both the transboundary assessment and the consultation carried out to fulfill the standards for an Espoo consultation.⁴³⁰ The Espoo Evidence points to the following gaps and inadequacies in the cumulative and transboundary impacts assessment:

- Narrow Scoping;
- Lack of analysis and risk calculations
- Inadequate information on shipping routes;
- Inadequate baseline studies;
- Lack of assessment on irreversible impacts on marine mammals;
- Inefficacy of proposed monitoring programs;
- Lack of assessment on noise impacts;
- Inadequate information on fuel types;

⁴²⁴ 2021-11-01 Greenland Institute of Natural Resources Response to Espoo Report (Filing ID 337224).

⁴²⁵ 2021-11-01 Oceans North Greenland Response to Espoo Report (Filing ID 337226).

⁴²⁶ 2021-11-01 WWF Greenland Response to Espoo Report (Filing ID 337228).

⁴²⁷ 2021-11-01 Greenland Chamber of Commerce Response to Espoo Report (Filing ID 337227).

⁴²⁸ 2021-03-18 BIMC Espoo Report (Filing ID 334015).

⁴²⁹ NuPPAA, ss. 2, *designated area*, 5(2) and 113.

⁴³⁰ 2021-11-01 WWF Greenland Response to Espoo Report, (Filing ID 337228); 2021-11-01 Greenland Institute of Natural Resources Response to Espoo Report (Filing ID 337224); 2021-11-01 Oceans North Greenland Response to Espoo Report (Filing ID 337226).

- Inadequate spill prevention and contingency planning;
- Black carbon impacts; and
- Impacts on Inuit harvesting and cultural rights.

530. WWF Denmark stresses that since the Project includes intensive shipping and anchorage in Greenland waters, a comprehensive study of the cross-border impacts should have been part of the initial impact assessment requirements and further research must be completed before any new permissions are granted.⁴³¹ MHTO agrees. Despite the proposed vast increase in shipping, Baffinland has not been required to conduct further studies on cross-border negative impacts.⁴³²

531. Greenland Institute of Natural Resources notes that the Project area of the Espoo Report does not include shipping routes in Davis Strait, Hudson Bay and Hudson Strait as well as the anchorage at Store Hellefiskebanke. This scoping is problematic and prevents a fulsome analysis of potential transboundary impacts.⁴³³

532. MHTO shares the Greenland Institute for Natural Resources concerns that ship traffic in Milne Inlet and the transportation of iron ore through Baffin Bay may reduce hunting opportunities in both Greenland and Canada and, further, that the transportation of the iron ore in the proposed Project must be considered one of the greatest threats to marine mammals in the Arctic.⁴³⁴ This is particularly so, given the Arctic specific limitations on ecological restoration.

533. The health of Eclipse Sound, which Milne Inlet opens into, is at stake. It is home to 10% to 15% of the world's population of narwhals. The Espoo Evidence states that the Project might permanently stop narwhal feeding in the area.⁴³⁵

534. Underwater noise pollution from shipping is one of the main concerns outlined in the Espoo Evidence. Many species have very large noise detection ranges, ranging from 20 to 75 kms depending on species and ice conditions.⁴³⁶ Excess noise levels reduce the acoustic communication ranges for marine mammals. Overlap between the frequencies produced by container ships and ice breakers, and hearing range of marine mammals, increases the likelihood of noise impacts on their behaviour, communication abilities, and stress hormone levels. Some parts of the Arctic have seen underwater noise double since 2013.⁴³⁷ Given the

⁴³¹ 2021-11-01 WWF Greenland Response to Espoo Report, p.5 (Filing ID 337228).

⁴³² 2021-11-01 WWF Greenland Response to Espoo Report, p.5 (Filing ID 337228).

⁴³³ 2021-11-01 Oceans North Greenland Response to Espoo Report, p.3 (Filing ID 337226).

⁴³⁴ 2021-11-01 WWF Greenland Response to Espoo Report, pp.3-4 (Filing ID 337228); 2021-11-01 Greenland Institute of Natural Resources Response to Espoo Report (Filing ID 337224).

⁴³⁵ 2021-11-01 Greenland Institute of Natural Resources Response to Espoo Report, p.2 (Filing ID 337224); 2021-11-01 WWF Greenland Response to Espoo Report, pp.3-4 (Filing ID 337228); 2021-11-01 Oceans North Greenland Response to Espoo Report, p.3 (Filing ID 337226).

⁴³⁶ See, 2021-11-01 WWF Greenland Response to Espoo Report (Filing ID 337228); 2021-11-01 Oceans North Greenland Response to Espoo Report (Filing ID 337226).

⁴³⁷ 2021-11-01 WWF Greenland Response to Espoo Report, p.1 (Filing ID 337228).

immense changes in a short time frame, and gaps in scientific knowledge on the impacts of noise, any further increases must be approached with precaution.

535. MHTO also shares concerns raised in the Espoo Evidence around other potential impacts, particularly around spills. The Espoo Evidence points out that while heavy fuel oil (“HFO”) is to be phased out by 2024, there is a loophole allowing for the continued use of HFO through to 2029.⁴³⁸ Black Carbon emissions contribute to atmospheric warming and have greater impact in the Arctic, leading to accelerated melting.⁴³⁹ This transboundary issue was not adequately addressed in the Espoo Report.

536. Environmental impacts in both international and Canadian waters will greatly affect the populations of narwhals, belugas, bowhead whales, walruses, ringed seal and beard seal. These populations are vulnerable to impacts along the shipping route, primarily at the beginning and end of the shipping period.

537. Further work is needed to analyze the extent of the potential transboundary environmental impacts. Special focus should be placed on assessing the noise distribution and the risk of oil spills, which the Espoo Evidence highlights as principal concerns.⁴⁴⁰

538. The Espoo Evidence confirms that the Phase 2 Project does not adequately address transboundary impacts on the environment and Inuit rights, and that NIRB must consider any assessment gaps in determining transboundary effects when making decisions about Project approval.

N. PROCEDURAL FAIRNESS MISSED THE MARK

539. The content of the duty of fairness owed by the Board to MHTO is significant. MHTO was entitled to a meaningful opportunity to present their cases fully and fairly, including the right to effectively challenge evidence that contradicted that case.

540. The Supreme Court of Canada in *Baker v. Canada (Minister of Citizenship and Immigration)*, [1999] 2 S.C.R. 817 enumerated a non-exhaustive list of contextual factors to be considered in determining what is required by the duty of fairness in a given set of circumstances: the nature of the decision being made and the process followed in making it; the nature of the statutory scheme, including the existence of an appeal procedure; the importance of the decision to the lives of those affected; the legitimate expectations of the person challenging the decision; and the choice of procedures made by the decision maker.⁴⁴¹

541. The “more the process provided for, the function of the tribunal, the nature of the decision-making body, and the determinations that must be made to reach a decision resemble judicial decision making, the more likely it is that procedural protections closer to the trial model will be required by the duty of fairness.”⁴⁴² Further, the “more important the decision is

⁴³⁸ 2021-11-01 WWF Greenland Response to Espoo Report (Filing ID 337228).

⁴³⁹ 021-11-01 Oceans North Greenland Response to Espoo Report, pp.6-7 (Filing ID 337226).

⁴⁴⁰ 2021-11-01 Greenland Institute of Natural Resources Response to Espoo Report, p.1 (Filing ID 337224).

⁴⁴¹ *Baker v Canada (Minister of Citizenship and Immigration)*, [1999] 2 S.C.R. 817 at paras 23-28 [*Baker*].

⁴⁴² *Baker* at para. 23.

to the lives of those affected and the greater its impact on that person or those persons, the more stringent the procedural protections that will be mandated”.⁴⁴³

542. With respect to legitimate expectations, if “the claimant has a legitimate expectation that a certain procedure will be followed, this procedure will be required by the duty”.⁴⁴⁴

543. The *Nunavut Impact Review Board Rules of Procedure* set out court-like rules for oral hearings, including concerning the receipt of evidence and the filing of evidence in advance of the hearing.⁴⁴⁵ Further, in accordance with the Nunavut Agreement, the Rules acknowledged the need to receive oral evidence and give Inuit the opportunity to speak:

The Board shall give due regard to Inuit traditional knowledge in all of its proceedings. The Board may, in an oral hearing, receive oral evidence from Elders, and shall give them the opportunity to speak at the beginning of a hearing, during a hearing, or at the conclusion of a hearing.⁴⁴⁶

544. The Nunavut Agreement and NuPPAA require that the Board “give due regard and weight to the tradition of Inuit oral communication and decision-making”.⁴⁴⁷

545. The Project will have a significant impact on the constitutionally protected treaty rights of MHTO members. Further, Inuit have a legitimate expectation based on the Nunavut Agreement, as incorporated into the *Nunavut Impact Review Board Rules of Procedure*, and based on prior NIRB hearings related to this Project, that they will have the opportunity to present their case and respond to the case of Baffinland orally in the hearing in accordance with Inuit oral traditions. As such, a high level of procedural fairness was owed to MHTO, including the opportunity to provide and respond to evidence orally.

546. The oral component of the hearing has been curtailed, and the virtual nature of the hearing has exacerbated the barriers to effective oral participation. Inuit were only allowed to ask a limited amount of questions of Baffinland orally – the remainder of the questions had to be submitted in writing. The written question process has proved highly unsatisfactory. It has not allowed Inuit to obtain the information necessary to understand the impacts of the Project or to test the evidence of Baffinland.

547. Baffinland responses often did not respond directly to the question asked or referred to large volumes of material on the Board website that did not provide the information that MHTO was requesting. The written question format also prevented MHTO from asking follow-up questions to clarify responses, and where time was provided at the hearing to ask follow-ups, it was insufficient.

⁴⁴³ *Baker* at para. 25.

⁴⁴⁴ *Baker* at para. 26.

⁴⁴⁵ *Nunavut Impact Review Board Rules of Procedure*, 2009, rules 32.1, 33.3, 38.1-38.7.

⁴⁴⁶ *Nunavut Impact Review Board Rules of Procedure*, 2009, rule 43.1.

⁴⁴⁷ Nunavut Agreement, s. 12.2.24; NuPPAA, ss. 103(3), 121(3)(b).

548. Baffinland has also provided a significant volume of material for review throughout the hearing process and after the Board's deadlines for submission of evidence.⁴⁴⁸

549. Much of this information is highly technical and substantive. The timing of the provision of this information has prevented MHTO from being able to effectively review this material, question Baffinland on this material and file responding evidence. This material should have been included in the original FEIS addendum to allow for full review under the Board's established timelines and response.

550. The information submitted by Baffinland at the end of the oral hearing included information that was integral to issues that MHTO was intervening on including the indicators, thresholds and responses for impacts to key species for the practice of harvesting rights.⁴⁴⁹

551. The material constitutes evidence that was not filed in reply to any particular intervenor evidence. An applicant "must produce and enter in its own case all the clearly relevant evidence it has, or that it intends to rely upon, to establish its case with respect to all the issues raised". Applicants are not entitled to save part of their evidence and enter it later in the hearing. This rule "prevents unfair surprise, prejudice and confusion which could result if the Crown or the plaintiff were allowed to split its case, that is, to put in part of its evidence -- as much as it deemed necessary at the outset -- then to close the case and after the defence is complete to add further evidence to bolster the position originally advanced."⁴⁵⁰

552. MHTO – and other intervenors - should have been given adequate opportunity to review the evidence, file evidence in response, and to provide submissions in relation to Baffinland's newly filed evidence.⁴⁵¹

553. Finally, Baffinland circulated materials within the affected communities in advance of the last week of the hearing that was referenced by community members on the record, but which the Board refused to acknowledge. This was concerning because several community members made references to the potentially misleading nature of the material, and some could

⁴⁴⁸ Examples of materials: 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 270 (Filing ID 334147); 2021-09-13 Baffinland Comments and Responses (Filing ID 336778); 2021-04-14 BIM New Support Slides-IT4M (Filing ID 334662); 2021-04-09 BIM Ltr NIRB Re Updated Engagement Summary, Commitment List and Revised Draft PC 005-IMTE (Filing ID 334460); 2021-04-02 2021 Draft Commitment List-IMTE (Filing ID 334329); 2021-04-08 BIM CRT Video ENV Monitoring-IA2E (Filing ID 334439); 2021-04-07 2021 Community Roundtable Presentation-IMTM (Filing ID 334428); 2021-04-06 2021 Community Roundtable Presentation-IMTM (Filing ID 334354); 2021-04-06 FAQ Hearing Pamphlet-IMTE (Filing ID 334353); 2021-03-23 BIM Appendix 12 (within Responses to Questions) at pdf page 270 (Filing ID 334147). See also, our motions, objections, and comments on this matter: 2021-02-17 MHTO Notice of Motion to Extend Timelines for Written Questions (Filing ID 333177); 2021-04-27 MHTO Notice of Objection Re NIRB Filing of Exhibits (Filing ID 335007); 2021-10-20 MHTO Ltr to NIRB Re Responses on BIM Written Comments (Filing ID 337078); 2021-11-10 MHTO Objection to the Filing of IUOE Video (Filing ID 337317).

⁴⁴⁹ See for example, 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Appendix 12 TARPS and Toolkits AMP, PDF p. 270 (Filing ID 334147).

⁴⁵⁰ *R v Krause*, [1986] 2 S.C.R. 466 at p. 473.

⁴⁵¹ *Canada (Minister of Indian Affairs and Northern Development) v Akisq'nuk First Nation*, 2017 FCA 175 at paras 26, 54, 70.

be seen holding copies of the material.⁴⁵² MHTO is very concerned that the Board did not hold Baffinland accountable, and require that Baffinland explain why alternate materials were presented to the communities.

554. In the result, MHTO has not had a meaningful opportunity to present their cases fully and fairly to the Board, including the right to effectively question Baffinland on evidence.

O. THE DUTY TO CONSULT AND ACCOMMODATE REMAINS OUTSTANDING

1. The Crown's Reliance on the Board's Process

555. Canada has indicated that it is relying on the Board's process to the extent possible to discharge the duty to consult, which may be permissible to some extent, but "subject always to the Crown's overriding duty to consider [the] adequacy [of that process] in any particular situation."⁴⁵³

556. Meaningful consultation is not simply a process of exchanging information. Where, as in this case, deep consultation is required, a meaningful two-way dialogue must ensue that leads to a demonstrably serious consideration of accommodation. The Crown must be prepared to make changes to the proposed plan of action based on information obtained through consultation.⁴⁵⁴

557. The Board's hearing has not been conducive to the interactive engagement required to discharge the duty to consult. Even as an information gathering tool, the process has been hampered by the lack of information on the specific impacts to harvesting rights gathered by Baffinland and how those impacts will be accommodated as required by the duty. MHTO has not received answers to their outstanding concerns that harvesting rights are being significantly impacted at the current levels of shipping and production, and that Baffinland has not shown that it can manage the vastly expanded operations without key species being displaced from traditional and safe harvesting areas.

558. The Crown is required to consult on these issues, but has not yet provided a process to do so. MHTO has put both the Crown and the Board on notice that it perceives the Board's process to be deficient to discharge the deep obligations to consult and accommodate in this case.⁴⁵⁵ As set out below, the Board cannot recommend that the Project proceed without the Crown having fulfilled its duty to consult and accommodate, which remains outstanding.

⁴⁵² "Even with the Baffinland poster stating, if you say 'no' to Phase 2, the list of benefits will be taken away. And if you say 'yes' to Phase 2, you'll be given -- you'll live a glorious new life with Baffinland in it. This ultimatum and rush to get Phase 2 approved without a proper timeline to consider the detrimental and irreversible effects to the 10 Pond Inlet area from Phase 2 will be devastating. 2021-12-01 NIRB Public Hearing Transcripts for November 3, 2021, Vol. 18, pp. 3410-3 to 3410-10 (Filing ID 337438) Anita Uttuvak of Pond Inlet.

⁴⁵³ *Haida Nation v British Columbia (Minister of Forests)*, 2004 SCC 73 at paras 42, 48 [*Haida*]; *Gitxaala Nation v Canada*, 2015 FCA 187 at paras 176, 179-181 [*Gitxaala*]; *Clyde River v Petroleum Geo-Services*, 2017 SCC 40 at para 22 [*Clyde River*].

⁴⁵⁴ *Tsleil-Waututh Nation v Canada (Attorney General)*, 2018 FCA 153 at para 564 [*Tsleil-Waututh*]; *Mikisew Cree First Nation v Canada (Minister of Canadian Heritage)*, 2005 SCC 69 at para 54 [*Mikisew*]; *Clyde River* at para 49.

⁴⁵⁵ *Clyde River* at para 22.

2. Law on the Duty to Consult and Accommodate

559. The duty to consult is grounded in the honour of the Crown and “seeks to protect Aboriginal and treaty rights while furthering reconciliation between Indigenous peoples and the Crown.”⁴⁵⁶

560. The duty to consult arises when the Crown has knowledge of the potential existence of the Aboriginal or treaty right and contemplates conduct that might adversely affect it.⁴⁵⁷ The content of the duty to consult and accommodate varies with the circumstances. The depth of the required consultation increases with the strength of the Indigenous claim and the seriousness of the potentially adverse effect upon the right.⁴⁵⁸

561. The Crown cannot contract out of its duty of honourable dealing with Aboriginal people – it is a doctrine that applies independently of the intention of the parties as expressed or implied in treaty.⁴⁵⁹ Where a party to a modern treaty perceives that a regulatory process is deficient to discharge the duty to consult and accommodate, it should, as MHTO did here, put the Crown on notice that further and direct engagement on the issues of concern is required.⁴⁶⁰

562. While “the Crown may rely on steps undertaken by a regulatory agency to fulfill its duty to consult in whole or in part and, where appropriate, accommodate, the Crown always holds ultimate responsibility for ensuring consultation is adequate.” Where “the regulatory process being relied upon does not achieve adequate consultation or accommodation, the Crown must take further measures to meet its duty.”⁴⁶¹ This might entail “filling any gaps on a case-by-case basis” or “seeking a postponement in order to carry out further consultation in a separate process before the decision is rendered.”⁴⁶²

563. Good faith is required on both sides in the consultative process. As set out in *Haida*, “[t]he common thread on the Crown's part must be the intention of substantially addressing [Aboriginal] concerns' as they are raised ... through a meaningful process of consultation”.⁴⁶³

564. Meaningful consultation is not intended simply to allow Indigenous peoples “to blow off steam” before the Crown proceeds to do what it always intended to do.⁴⁶⁴ Consultation “that excludes from the outset any form of accommodation would be meaningless.”⁴⁶⁵

565. Where “a strong prima facie case exists for the claim, and the consequences of the government's proposed decision may adversely affect it in a significant way, addressing the

⁴⁵⁶ *Clyde River* at para 19.

⁴⁵⁷ *Haida* at para 35.

⁴⁵⁸ *Haida* at para 36; *Tsleil-Waututh* at para 488.

⁴⁵⁹ *Beckman v Little Salmon/Carmacks First Nation*, 2010 SCC 53 at para 61; *Haida*, para. 32; Nunavut Agreement, ss. 2.2.1, 2.7.3(a)

⁴⁶⁰ *Clyde River* at para 22.

⁴⁶¹ *Clyde River* at para 22. (emphasis added)

⁴⁶² *Clyde River* at para 22.

⁴⁶³ *Haida* at para 42.

⁴⁶⁴ *Mikisew* at para 54; *Tsleil-Waututh* at para 499.

⁴⁶⁵ *Mikisew* at para 54.

Aboriginal concerns may require taking steps to avoid irreparable harm or to minimize the effects of infringement.”⁴⁶⁶

566. As a constitutional imperative, the duty to consult gives rise to a special public interest that supersedes other concerns commonly considered by tribunals. In the case of the Board, a project authorization that breaches the constitutionally protected rights of Indigenous peoples cannot serve the public interest both regional and national.⁴⁶⁷

567. Any “decision affecting Aboriginal or treaty rights made on the basis of inadequate consultation will not be in compliance with the duty to consult, which is a constitutional imperative.” Where the decision is challenged, “it should be quashed on judicial review.”⁴⁶⁸

3. MHTO members are owed a Deep Duty to Consult and Accommodate

568. MHTO members are owed consultation at the deep end of the spectrum. MHTO members have established treaty rights to harvest wildlife within the area to be impacted by the Project.⁴⁶⁹ These rights are central to the way of life of MHTO members and are depended upon to survive and to maintain their sense of belonging in the world.⁴⁷⁰ These rights are of high significance.

569. The importance of harvesting rights to marine mammals was recognized by the Nunavut Court of Justice as follows:

The Inuit right which is of concern in this matter is the right to harvest marine mammals. Many Inuit in Nunavut rely on country food for the majority of their diet. Food costs are very high and many would be unable to purchase food to replace country food if country food were unavailable. Country food is recognized as being of higher nutritional value than purchased food. But the inability to harvest marine mammals would impact more than ... just the diet of Inuit. The cultural tradition of sharing country food with others in the community would be lost. The opportunity to make traditional clothing would be impacted. The opportunity to participate in the hunt, an activity which is fundamental to being Inuk, would be lost. The Inuit right which is at stake is of

⁴⁶⁶ *Haida* at para 47.

⁴⁶⁷ *Tsleil-Waututh* at para 507; *Clyde River* at para 40.

⁴⁶⁸ *Clyde River* at para 24.

⁴⁶⁹ Nunavut Agreement, ss. 5.1.2, 5.1.3(a), 5.6.1, 5.7.16, 5.7.30, 5.7.42, 15.1.1, 12.2.24, 16.1.1, 20.2.4; NuPPAA, ss. 103(3), 121(3)(b); Examples: NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1904:18-1905:3 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1906:4-1906:5 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1910:3-1910:7 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1938:26 – 1939:3 (Filing ID 333443).

⁴⁷⁰ NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1909:3-1910:11 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1927:1 – 1927:4 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1929:24 – 1930:3 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1944:6 (Filing ID 333443); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 1:Introduction), (Filing ID 333024); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine’s Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.1:Terrestrial Impacts), Elijah Panipakoocho at 2:22 (Filing ID 333025).

high significance. This suggests a significant level of consultation and accommodation is required.⁴⁷¹

570. The Project is located in the heart of the territory where MHTO members have been practicing their rights for generations.⁴⁷² It would visit significant adverse impacts on the lands, waters, and wildlife upon which MHTO members depend, including through a substantial increase in shipping through MHTO member's main harvesting areas, a new railway that will bisect the terrestrial harvesting area, new ore-dock and increased activity at Milne Port and increased production with increased dust contamination.

571. The main areas where MHTO members hunt, fish, and camp, including the travel routes to access these sites, will be impacted by the Project.⁴⁷³ Harvesting in the areas that MHTO members have always done so is critical to cultural continuity and passing down traditions to the next generation.⁴⁷⁴ Interruption of these practices would be devastating – it is not sufficient to tell community members to go elsewhere if key species avoid the area due to impacts from the Project or if harvesting areas can no longer be accessed safely.⁴⁷⁵

⁴⁷¹ *Qikiqtani Inuit Association v Canada (Minister of Natural Resources)*, 2010 NUCJ 12 at paras 25, 43, 47; see also *Clyde River* at para 43; Nunavut Agreement, s. 5.6.1-5.6.3; s. 5.7.16-5.7.18.

⁴⁷² 2019-06-14 Tusaqtavut Study-Pt 1 (Filing ID 325450); 2019-06-14 Tusaqtavut Study-Pt 2 (Filing ID 325451); 2019-06-14 Tusaqtavut Study-Pt 3 (Filing ID 325452); 2019-06-14 Tusaqtavut Study-Pt 4 (Filing ID 325453); 2019-06-14 Tusaqtavut Study-Pt 5 (Filing ID 325454); 2019-06-14 Tusaqtavut Study-Pt 6 (Filing ID 325455); 2019-06-14 Tusaqtavut Study-Pt 7 (Filing ID 325456); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.5: Marine Impacts – Shipping Disturbance on Narwhals), (Filing ID 333031).

⁴⁷³ 2019-06-14 Tusaqtavut Study-Pt 1, pp. 3-5 (Filing ID 325450); 2019-06-14 Tusaqtavut Study-Pt 2, p. 25 (Filing ID 325451); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.1: Terrestrial Impacts), Elijah Panipakoocho at 2:22 (Filing ID 333025); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.2: Terrestrial Impacts-Dust), (Filing ID 333026); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.1: Marine Impacts – Dust Pollution), (Filing ID 333027); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.2: Marine Impacts – Dust Pollution), (Filing ID 333028); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.3: Marine Impacts - Shipping Disturbance on Seal), (Filing ID 333029); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.4: Marine Impacts – Shipping Impact on the Fall and Spring Habitat of the Seal), (Filing ID 333030); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.5: Marine Impacts – Shipping Disturbance on Narwhals), (Filing ID 333031).

⁴⁷⁴ 2019-06-14 Tusaqtavut Study-Pt 6, pp. 120, 127-128 (Filing ID 325455); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1909:3-1910:2 (Filing ID 333443); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 1: Introduction), (Filing ID 333024); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.3: Marine Impacts - Shipping Disturbance on Seal), (Filing ID 333029); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 4: Conclusion), (Filing ID 333032).

⁴⁷⁵ *Mikisew* at paras. 47-48; *Yahey v British Columbia*, 2021 BCSC 1287 at paras. 23-24.

572. Further, important wildlife habitat for supporting harvesting activities, including for narwhal, seal and caribou, would be impacted.⁴⁷⁶ These species are depended on for sustenance and for the making of traditional clothing and sleds.⁴⁷⁷

573. Inuit heavily rely on wildlife and harvesting for their food, clothing, well-being, culture, language, and economy. For centuries, Inuit of Pond Inlet have passed down knowledge from generation to generation while out on the land. If wildlife depended on for the practice of treaty rights declines or moves out of the area, members will not be able to successfully harvest in traditional areas and pass down knowledge to the next generation. These effects on MHTO members' culture would be irreversible. In addition, they would undermine food security.

574. As highlighted above, the existing project activities have already resulted in Inuit observing significant adverse impacts to marine hunting, terrestrial hunting, fishing, fresh water, travel and trails, and cultural continuity.⁴⁷⁸ The substantial expansion of production and shipping will only increase these impacts, including visiting additional significant adverse impacts to key species relied on for harvesting such as narwhal, seal, Arctic char and caribou. The Project threatens the continued availability of these key species in MHTO's harvesting area and the continued reliance on country foods. Thus, a duty to consult and accommodate at the deepest end of the spectrum is owed to MHTO members.

4. The Crown has not Discharged its Duty to Consult and Accommodate

i) Lack of Full Information

575. The Crown's duty to consult "imposes on it a positive obligation to reasonably ensure that aboriginal peoples are provided with all necessary information in a timely way so that they have an opportunity to express their interests and concerns."⁴⁷⁹

576. The Board's process has been hampered by the lack of complete information provided by Baffinland, tight timelines, and information not being provided in Inuktitut. This has resulted in

⁴⁷⁶ 2019-06-14 Tusaqtavut Study-Pt 1, pp. 3-5 (Filing ID 325450); 2019-06-14 Tusaqtavut Study-Pt 4, pp. 38-56, 59-85 (Filing ID 32543); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1906:4-1906:6 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1934:2 – 1934:6 (Filing ID 333443); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1947:21-1948:2 (Filing ID 333443)

⁴⁷⁷ 2019-06-14 Tusaqtavut Study-Pt 1, pp. 3-5 (Filing ID 325450); Tusaqtavut Study-Pt 4, pp. 47-48, 69-70 (Filing ID 32543); NIRB Public Hearing Transcripts for February 5, 2021, Vol. 11, pp. 1909:3-1910:2 (Filing ID 333443); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 2.1: Terrestrial Impacts), Elijah Panipakoocho at 2:22 (Filing ID 333025); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 1: Introduction), (Filing ID 333024); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.3: Marine Impacts - Shipping Disturbance on Seal), (Filing ID 333029); 2021-02-05 MHTO: Compendium of Testimonies on the Impacts of Baffinland Iron Mine's Mary River project on Ecosystems, Wildlife, and Residents of Pond Inlet (Part 3.4: Marine Impacts – Shipping Impact on the Fall and Spring Habitat of the Seal), (Filing ID 333030).

⁴⁷⁸ 2019-06-14 Tusaqtavut Study-Pt 4, pp. 48-56 (Filing ID 32543).

⁴⁷⁹ *Mikisew* at paras 54-55, 64; *Gitxaala* at para 235.

MHTO not being provided with the information it needs to understand the extent of the impacts to members' treaty rights.

577. Baffinland has not provided complete information to the Board in order to understand the impacts on treaty rights and the measures available to prevent, mitigate, manage or accommodate those impacts. Baffinland has further provided significant volumes of material late in the process that has resulted in MHTO being prevented from asking questions on this material. This material has only been available online and has not been disseminated to the community.

578. In the hearing, MHTO was limited in the oral questions that it could ask Baffinland and other intervenors, including with respect to questions that went to the core issue of the impact of the Project on treaty rights. As Inuit have an oral culture, this limit on asking questions in person placed significant constraints on Inuit participation in the hearing, and did not allow for the required regard for Inuit oral communication and decision-making.⁴⁸⁰

579. MHTO had an opportunity to ask questions of Baffinland in writing. However, this highly technical process proved unsatisfactory. First, Baffinland's answers were provided in a 339 page document that was only available online in English and was not distributed throughout the community. Second, Baffinland's answers often avoided the question, referred to material that did not answer the question, or required Inuit to review voluminous online filings. Baffinland did not attempt to summarize the information in a concise manner in its responses so that it is easily understood and accessible to Inuit. Third, there was little to no opportunity to follow-up or ask for clarification with respect to the new information provided by Baffinland.

580. Consultation in its most simplistic form is "talking together for mutual understanding".⁴⁸¹ No mutual understanding on the core issues of impacts to treaty rights and feasible accommodations has emerged from this process.

581. For example, MHTO asked: 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?

582. Baffinland merely responded by quoting the precautionary principle:

Generally the Precautionary Principle will govern such determinations: "When an activity raises threats of harm to environmental, sociocultural, and economic wellbeing and resilience, precautionary measures and preventative action should be taken using a systems approach, even if some cause and effect relationships are not fully established."⁴⁸²

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

⁴⁸⁰ Nunavut Agreement, s. 12.2.24; NuPPAA, ss. 103(3), 121(3)(b).

⁴⁸¹ *Clyde River* at para 49.

⁴⁸² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-31(2), p. 57 (Filing ID 334147).

584. Baffinland responded that it was not obligated to consider cumulative impacts on caribou harvest:

Baffinland did not assess cumulative impacts on caribou harvest (including harvest quotas). It was not in the scope of the NIRB assessment. Harvest and quotas are the responsibilities of the GN and the NWMB.⁴⁸³

585. MHTO asked: 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?

586. Baffinland deferred consideration of the question to QIA and the development of the Adaptive Management Plan:

Baffinland is not asking Inuit to make a choice between culture/ability to harvest and Phase 2. We believe both can proceed in parallel. It is anticipated that these considerations such as those described in the MHTO’s question will be brought forward by QIA (in consultation with Inuit) into the development of the indicators, thresholds and actions that will be included in the final Adaptive Management Plan.⁴⁸⁴

587. MHTO asked “[w]here 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?”

588. Baffinland merely responded by referring back to its application material that MHTO already determined did not provide the scientific assessment requested:

Assessment materials to support conclusions regarding the efficacy of mitigation measures associated with the current Project or proposed for Phase 2 to lessen impacts of the Project on marine mammals and Inuit harvesting have been provided in the FEIS Addendum documentation, including TSD 24, TSD 25, the Assessment of Icebreaking and the Socio- Economic Effects of Icebreaking as well as supplementary analyses provided in response to intervenor comments on these assessments.⁴⁸⁵

589. MHTO has raised repeatedly throughout the hearing the failure of Baffinland to consider impacts to the unique harvesting rights of Mittimatalingmiut. MHTO has set out in detail above, in the section entitled “The Project will have Significant Adverse Impacts on Mittimatalingmiut Harvesting Rights”, the information gaps in Baffinland’s assessment with respect to harvesting rights. In the result, MHTO has not been able to obtain full information from Baffinland, including with respect to:

- (a) impacts on narwhal and narwhal harvesting rights;

⁴⁸³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-31, p. 56 (Filing ID 334147).

⁴⁸⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-35(1), p. 57 (Filing ID 334147).

⁴⁸⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-23, p. 50 (Filing ID 334147).

- (b) impacts on seal and seal harvesting rights;
- (c) impacts on caribou and caribou harvesting rights;
- (d) impacts on fishing and fish health;
- (e) impacts on the ability to continue to access freshwater drinking resources from the land;
- (f) impacts on the ability to travel inland and on the sea ice;
- (g) the cumulative impacts of the Project on harvesting rights taking into account the existing disturbance in the area; and
- (h) the mitigation measures that are technically and economically feasible that can be implemented to prevent, mitigate or manage impacts to harvesting rights, including the potential to relocate shipping operations.

590. Thus, much information remains outstanding that is necessary to understand and address the unique impacts of the Project on MHTO members' treaty rights. It is incumbent upon the Crown to act to either provide the outstanding information or explain to MHTO why it is considered unnecessary. To date, the Crown has done neither.

ii) The Lack of an Adequate Assessment of Impacts on Inuit Harvesting Rights and Meaningful Engagement

591. Consultation must focus on rights. The Crown is required "to inform itself of the impact the proposed project will have on an affected First Nation, and, if appropriate in the circumstances, communicate its findings to the First Nation and attempt to substantially address the concerns of the First Nation."⁴⁸⁶

592. In *Clyde River*, the Supreme Court of Canada stated that the National Energy Board was required to focus on Inuit treaty rights: the "consultative inquiry is not properly into environmental effects per se. Rather, it inquires into the impact on the *right*".⁴⁸⁷ Mitigation measures must provide "reasonable assurance that their constitutionally protected treaty rights were considered as rights, rather than as an afterthought to the assessment of environmental concerns."⁴⁸⁸

593. In *Gitxaala*, it was mandated by the Federal Court of Appeal that "where the Crown knows, or ought to know, that its conduct may adversely affect the Indigenous right or title of more than one First Nation, each First Nation is entitled to consultation based upon the unique facts and circumstances pertinent to it."⁴⁸⁹

594. As discussed fully above in the sections entitled "Failure of Baffinland to Incorporate Inuit Qaujimajatuqangit" and "Failure to Assess Impacts to Harvesting Rights", Baffinland's

⁴⁸⁶ *Tsleil-Waututh* at para 503, citing *Mikisew* at para 55.

⁴⁸⁷ *Clyde River* at para 45.

⁴⁸⁸ *Clyde River* at para 51.

⁴⁸⁹ *Gitxaala* at para 236; *Tsleil-Waututh* at para 506.

assessment rests on an inadequate collection of IQ. Baffinland predominantly relies on information collected in relation to the original project and does not take into account MHTO's experience with the existing project impacts. Without the inclusion of IQ and consideration of community observed impacts from the existing project, Baffinland's impact assessment lacks sufficient support and should not be relied upon.

595. Further, Baffinland's generic assessment does not assess and address the specific impacts to the treaty rights of Mittimatalingmiut.⁴⁹⁰

596. When MHTO asked Baffinland what is the current (operating) project's effect on harvesting, including the effort and experience of Inuit hunters, Baffinland simply pointed to a study by QIA noting that "[t]he Tusaqtavut Study for Pond Inlet (QIA, 2019) reported that the project currently impacts Inuit harvesting and the experience of being out on the land."⁴⁹¹

597. However, as noted above, the Tusaqtavut Study is "limited to a sample of community from Pond Inlet" and does not constitute a "full effects characterization".⁴⁹² The IQ collected in the Tusaqtavut Study still needs to be incorporated into a full "[a]ssessment 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."⁴⁹³

598. Baffinland admits that "Baffinland does not currently have a formal monitoring program to assess impacts to harvesting."⁴⁹⁴ The "Marine Monitoring Plan is not meant to be directly focused on effects of the Project on Inuit harvest of marine mammals."⁴⁹⁵ Baffinland further acknowledges that it did not consider the caribou harvest per level of effort for Mittimatalingmiut.⁴⁹⁶

599. Baffinland has focused in its general assessment on the environmental effects at the population level for key indicator species and overall integrity of the ecosystem.⁴⁹⁷ Baffinland

⁴⁹⁰ Nunavut Agreement, s. 5.6.1-5.6.3; s. 5.7.16-5.7.18.

⁴⁹¹ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-32, p. 56 (Filing ID 334147).

⁴⁹² 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, pp. 3, 5 (Filing ID 325448).

⁴⁹³ 2019-06-14 QIA Cover Letter to NIRB re: Tusaqtavut Study Specific to Mary River Project Phase 2 Proposal, p. 5 (Filing ID 325448).

⁴⁹⁴ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-35, p. 57 (Filing ID 334147).

Baffinland was supposed to update and modify its marine monitoring plan but has not. Since 2015, marine mammal monitoring has occurred inconsistently year to year. No changes have been made to specifically monitor effects of icebreaking activities on narwhals and seals or harvesting the last three-and-a-half years. Baffinland has been operating icebreakers without any environmental assessment all that time." NIRB Public Hearing Transcripts for April 13, 2021, Vol. 14, pp. 2731:6 - 2731:14 (Filing ID 335047) Eric Ootoovak, MHTO.

⁴⁹⁵ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-23, p. 50 (Filing ID 334147).

⁴⁹⁶ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-33, p. 57 (Filing ID 334147).

⁴⁹⁷ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-25, p. 51 (Filing ID 334147).

has not assessed the impacts from the Project to harvesting rights for Mittimatalingmiut at scales that are meaningful to Mittimatalingmiut, taking into account existing impacts.

600. There has been no consideration of the unique nature of the rights and practices of MHTO members and integration of those rights and practices into the effects assessment.

601. Understanding the impacts to the stocks of concern, which are relied upon by MHTO members, and to the areas where MHTO members hunt, is critical to understanding the impacts to harvesting rights. Such an assessment of the specific nature of the rights to be impacted and the extent of the impacts, taking into account existing cumulative impacts, has not yet happened for the Project for Mittimatalingmiut.

602. For example, assessing the impacts to the overall narwhal population in the region does not capture the potential nature and extent of the impacts to harvesting rights within the areas relied upon by MHTO members. MHTO members have already observed significant impacts to their harvesting rights, including narwhal not returning in the same numbers to the areas that they have traditionally been safely hunted since the increase in marine shipping and consequent impacts to harvesting rights, but this is not captured in the effects assessment.

603. Recent monitoring confirms that narwhal are declining or avoiding areas relied upon by MHTO over multiple years.⁴⁹⁸ This displacement that has the potential to be significantly exacerbated by the vast increase in shipping and icebreaking for the Project has significant implications for harvesting rights that have not been assessed and addressed.

604. The Crown is obligated to take into account the existing limitations and cumulative effects on the practice of MHTO's rights when considering the seriousness of the impacts of proposed new developments.⁴⁹⁹ In *West Moberly*, the fragile state of the caribou herd was to be taken into account in considering the impacts of the proposed new development, along with the potential for the bulk sampling and advanced exploration permits at issue to open up caribou habitat for more widespread mining.⁵⁰⁰ Prior to project approval in that case, the petitioners' position that the exploration program should be cancelled, the activities relocated and the caribou herd restored had to be given meaningful consideration, and a plan was required to ensure protection and rehabilitation of the caribou herd.

605. MHTO has not been meaningfully engaged with respect to its fundamental concern that the existing project is having significant impacts on harvesting rights (that have not been incorporated into the assessment) and that the expanded Project operations cannot be managed and mitigated to avoid the displacement of key species from traditional hunting areas. MHTO has further not been meaningfully engaged on its concern that the Project will open up the area

⁴⁹⁸2021-04-08 BIMC Tech Memo Re Preliminary Sum of 2020 Narwhal Monitoring Programs, p. 1, 7 (Filing ID 334440); 2021-05-18 -DFO Ltr Re Preliminary Narwhal Monitoring, p. 4 (Filing ID 335350).

⁴⁹⁹ *West Moberly First Nations v. British Columbia (Chief Inspector of Mines)*, 2011 BCCA 247 at paras. 117-119; *Chippewas of the Thames First Nation v. Enbridge Pipelines Inc.*, 2017 SCC 41 at para. 42; *Yahey* at paras. 1735-1737, 1750.

⁵⁰⁰ *West Moberly* at paras. 119, 124-125.

for further ore development, as expressly contemplated by Baffinland in its application, that cannot be sustained by the unique environment.⁵⁰¹

606. Understanding the impacts of the Project, and Inuit groups' perspective on the impacts of the Project, on treaty rights is a fundamental aspect of fulfilling the duty to consult. Without an adequate assessment of the impacts that incorporates the Mittimatalingmiut perspective on their rights and existing cumulative impacts, the duty to consult cannot be discharged. This is a gap in the assessment that must be filled prior to Project approval.

iii) Mitigation Measures Directed at Harvesting Rights have not been Developed

607. Given that there has been no assessment of the unique impacts to MHTO member's rights, taking into account existing impacts, the process has not proceeded to the point where the sufficiency of proposed accommodations can be developed. The result of Baffinland's approach is that specific impacts to harvesting rights have not been adequately considered and specific accommodations developed to ensure the protection of key species.

608. As discussed above, the effectiveness of general mitigation measures have not been proven. Baffinland has not shown that impacts to treaty rights can be prevented, mitigated or managed.

609. With the recently observed displacement of narwhal, Baffinland proposed to stop icebreaking for the opening of the 2021 season. However, the Project proposes to vastly increase the acoustic disturbance through expanded shipping and icebreaking for this species that has proven to be sensitive to acoustic disturbance and to display avoidance behaviour. MHTO has not been provided with an answer as to how shipping can be expanded without losing access to this vital resource (and other marine mammal species), or had their concerns demonstrably integrated into the proposed plan of action.

610. Further, responses to Project impacts in the Adaptive Management Plan are left to be developed after approval, and these responses would only be triggered if a certain threshold (that has also yet to be developed) for impact is observed.

611. For example, when MHTO asked Baffinland what strategies would be employed if "the impacts of the railway or other activities are determined to be so unacceptable to Inuit, perhaps irreversible and permanent", Baffinland simply states that it "will act in accordance with the parameters of the Adaptive Management Plan agreed to with QIA".⁵⁰² The Adaptive Management Plan is not finalized and does not include objectives, indicators, thresholds and responses for impacts to harvesting rights.

612. When MHTO asked Baffinland what are the existing EWIs for impacts to Inuit harvesting (per level effort), Baffinland responded that "[t]here are no existing early warning indicators for impacts to Inuit harvesting (per level of effort) of seal and narwhal in

⁵⁰¹ 2020-01-21 Memo Appendix C: Project Description, pp. 2-3 (Filing ID 328818).

⁵⁰² 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-6, p. 38 (Filing ID 334147).

Baffinland's management plans, nor is there any requirements for these to be in place."⁵⁰³ Baffinland goes on to state that through the ICA Inuit objectives, indicators, thresholds and responses will be established.

613. These potential responses, that may or may not be put in place, remain ill-defined due to the fact that they are at the nascent planning stages.⁵⁰⁴ For all, the trigger or threshold for the proposed responses have not been agreed, with Baffinland proposing to require a high level of certainty that the impact is caused by the Project. A threshold or tipping point beyond which Project operations would have to be altered or stopped if the Project results in unacceptable impacts is not defined.⁵⁰⁵

614. This is an area where the species are not used to the level of disturbance proposed by Baffinland. Contrary to other projects, that may have a small contribution to the overall acoustic disturbance, this Project will visit significant new disturbance on species that are not used to that level of activity. Precaution is warranted, including waiting to consider the Project until it is determined whether the measures implemented in 2021 are effective at mitigating the observed decline/avoidance of narwhal in Eclipse Sound.

615. Fundamentally, a concrete plan to ensure protection of the key species that are critical to the survival of Mittimatalingmiut has not been developed. It is not known whether the Project can proceed without displacement of and impacts to key, vulnerable species, and it is not sufficient to presume that an after-the-fact adaptive management plan will suffice.⁵⁰⁶ Adaptations to the Project to address impacts to treaty rights have not been considered, and information to inform those adaptations has not been collected.

616. A commitment to monitor impacts after approval through the culture, resources and land use monitoring, and adaptively manage impacts, cannot displace the need to understand the extent of the treaty rights, assess impacts to treaty rights and put into place mitigations and accommodations as required by the duty in advance of Project approval. This has not occurred for the Project.

iv) The Crown has not planned for a Meaningful Consultation Process prior to the Minister's Decision

617. Despite MHTO and other Inuit organizations raising concerns about the inadequacy of the Board's process to discharge the duty to consult, the Crown has not provided guidance on how it will address the gaps and the steps that it will take to discharge the duty to consult prior to Project approval.

⁵⁰³ 2021-03-22 Baffinland Post-Hearing Question Responses Phase 2 Proposal – Mary River Project: Response to MHTO-22, p. 49 (Filing ID 334147).

⁵⁰⁴ *Tsleil-Waututh* at para 651.

⁵⁰⁵ *Yahey* at paras 1619-1620, 1774.

⁵⁰⁶ *West Moberly* at para 149.

618. MHTO has not had the opportunity to consult with the Crown outside of the Board's process. At the close of the hearing, MHTO has outstanding issues with respect to the impacts of the Project on its harvesting rights that have not been assessed or addressed.

619. As a constitutional imperative, the duty to consult must be discharged prior to any recommendation that the Project proceed.⁵⁰⁷ A Project that breaches the constitutionally protected treaty rights of Indigenous peoples cannot reflect the priorities and values of the residents of the Nunavut Settlement Area, enhance and protect the existing and future well-being of the residents and communities of the Nunavut Settlement Area or be in the regional or national interest.

620. Thus, with the duty to consult outstanding, the Board must not recommend that the Project proceed at this time. The Crown must act to fill the gaps in the process prior to the Project being considered.

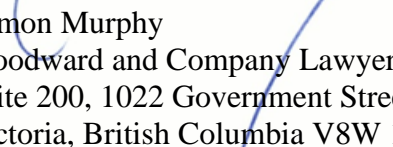
IV. CONCLUSION

621. MHTO respectfully submits that the Board should:

- i) ensure that meaningful consultation occurs before the Board issues the recommendation for the Project or recommend against approving the Project due to inadequate consultation;
- ii) find that the Project will have significant adverse ecosystemic and socio-economic impacts, which Baffinland has not shown can be prevented, mitigated, or managed; and
- iii) recommend against the Project proceeding.

All of which is respectfully submitted.

Date: January 10, 2022



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⁵⁰⁷ *Clyde River* at paras 24, 40; *Tsleil-Waututh* at paras 507, 526; *Gitxaala* at para 237.

List of Authorities

	Authorities
1.	<i>114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)</i> , 2001 SCC 40
2.	<i>Baker v Canada (Minister of Citizenship and Immigration)</i> , [1999] 2 S.C.R. 817
3.	<i>Beckman v Little Salmon/Carmacks First Nation</i> , 2010 SCC 53
4.	<i>Canada (Minister of Indian Affairs and Northern Development) v Akisq'nuk First Nation</i> , 2017 FCA 175
5.	<i>Chippewas of the Thames First Nation v. Enbridge Pipelines Inc.</i> , 2017 SCC 41
6.	<i>Clyde River v Petroleum Geo-Services</i> , 2017 SCC 40
7.	<i>Gitxaala Nation v Canada</i> , 2015 FCA 187
8.	<i>Haida Nation v British Columbia (Minister of Forests)</i> , 2004 SCC 73
9.	<i>Mikisew Cree First Nation v Canada (Minister of Canadian Heritage)</i> , 2005 SCC 69
10.	<i>Qikiqtani Inuit Association v Canada (Minister of Natural Resources)</i> , 2010 NUCJ 12
11.	<i>R v Krause</i> , [1986] 2 S.C.R. 466
12.	<i>Tsleil-Waututh Nation v Canada (Attorney General)</i> , 2018 FCA 153
13.	<i>West Moberly First Nations v. British Columbia (Chief Inspector of Mines)</i> , 2011 BCCA 247
14.	<i>Yahey v. British Columbia</i> , 2021 BCSC 1287
	Legislation
15.	<i>Constitution Act</i> , 1982, being Schedule B to the <i>Canada Act 1982 (UK)</i> , 1982, c 11

16.	<i>Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada</i> , 25 May 1993
17.	<i>Nunavut Planning and Project Assessment Act</i> , SC 2013, c 14