



Nunavut Impact Review Board Reconsideration Report and Recommendations

Production Increase Proposal

Baffinland Iron Mine Corporation

NIRB File No. 08MN053



August 31, 2018

The logo features a stylized green leaf background. At the top, the Inuktitut phrase "ᐅᑦᓂᕈ ᐃᑦᓂᕈᓴᐅᑦ ᐅᓂᓴᐱᕐᓂᕐ" is written in black. Below it is a red maple leaf. The acronym "NIRB" is prominently displayed in large, bold, black letters. Underneath each letter is its corresponding syllable in Inuktitut: "NUNAVUT" under N, "IMPACT" under I, "REVIEW" under R, and "GARDIAN" under B. At the bottom, the full name "NUNAVUMI AVATILIKIYIN KATIMAYIN" is written in all caps.

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.

23(1) The Board must exercise its powers and perform its duties and functions in accordance with the following primary objectives:

- (a) to protect and promote the existing and future well-being of the residents and communities of the designated area; and
- (b) to protect the ecosystemic integrity of the designated area.

23(2) In exercising its powers or performing its duties and functions in accordance with the objective set out in paragraph (1)(a), the Board must take into account the well-being of residents of Canada outside the designated area.

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i

SIGNATURE PAGE

THIS REPORT IS SUBMITTED TO THE HONOURABLE DOMINIC LEBLANC, MINISTER OF INTERGOVERNMENTAL AFFAIRS, NORTHERN AFFAIRS AND INTERNAL TRADE BY THE NUNAVUT IMPACT REVIEW BOARD ON THIS 31ST DAY OF AUGUST, 2018.



Elizabeth Copland
Chairperson



Phillip (Omingmakyok) Kadlun
Board Member



Marjorie Kaviq Kaluraq
Vice Chairperson



Allen Maghagak
Board Member



Madeleine Qumuatuq
Board Member



Catherine Emrick
Board Member

EXECUTIVE SUMMARY

On April 30, 2018 Baffinland Iron Mines Corporation (Baffinland or Proponent) submitted to the Nunavut Planning Commission (NPC or Commission) and the Nunavut Impact Review Board (NIRB or Board) the “Production Increase, Fuel Storage and Milne Port Accommodations Modification Proposal” (Production Increase Proposal) a proposed modification to the approved Mary River Iron Mine located in the Qikiqtani Region of Nunavut and governed by NIRB Project Certificate No.: 005 (as amended). On May 18, 2018 the NIRB received a referral from the NPC to screen the Production Increase Proposal; the Board subsequently determined that the assessment of this proposal would be conducted through a reconsideration of the Terms and Conditions of Project Certificate No. 005 as provided for under Article 12, Section 12.8.2 of the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 112 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*).

The Production Increase Proposal proposed three primary modifications to the approved Mary River Iron Mine Project:

- The installation of a new 380-person accommodations camp at Milne Port.
- The addition of a 15 million litre (ML) diesel fuel tank at Milne Port; and
- An increase in the volume of ore from the current limit of 4.2 million tonnes of ore per annum (Mt/a) to 6 Mt/a that would be transported by truck on the Milne Inlet Tote Road from the Mary River Mine site to Milne Port and subsequently shipped out of Milne Port during the open water season.

Baffinland also requested that NIRB reconsider and amend Conditions 179(a) and 179(b) of Project Certificate No. 005 which limit the total volume of ore that can be transported by truck on the Tote Road and shipped via Milne Port in each calendar year.

During the reconsideration process, on July 12, 2018 the Board’s staff facilitated a Community Information Session in the community most directly affected by the proposal, Pond Inlet, and the comments, questions and concerns expressed during that session were conveyed, in summary form, to the Board for their consideration. Reflecting the scale and scope of the Production Increase Proposal and the feedback received from interested parties, the Board determined that it was not necessary to conduct a Public Hearing to support its decision-making for this assessment.

As outlined in greater detail within this Reconsideration Report, the NIRB’s assessment of the potential ecosystemic and socio-economic effects of the Production Increase Proposal was informed by the Board’s review of:

- The Production Increase Proposal, Final Environmental Impact Statement Addendum (FEIS Addendum) and responses to comments filed by Baffinland;
- Comments supplied by Intervenor and community members throughout the Board’s consideration of the Production Increase Proposal, including within the final written submissions from parties provided in July;

- Public concerns raised during the NIRB's Community Information Session in Pond Inlet in July; and
- The results from the NIRB's monitoring of the Mary River Project (2013-2018).

The Board has concluded that the following two activities, included within the Production Increase Proposal, can be approved to proceed to the permitting stage:

- The addition of a 15 ML diesel fuel tank to the existing Fuel Storage Facility at Milne Port; and
- The installation of a new 380-person accommodations camp at Milne Port.

The Board has also concluded that there are no changes to the existing Terms and Conditions of Project Certificate No. 005 and/or changes to the existing Monitoring Program necessary for these activities to proceed in a manner that is consistent with the objectives set out in Article 12, Section 12.2.5 of the *Nunavut Agreement*.

With respect to the aspect of the Production Increase Proposal that, if approved, would allow for an increase from the existing limit of 4.2 Million tonnes per year (Mt/a) to 6 Mt/a in the amount of ore hauled via the Tote Road and shipped from Milne Port, the NIRB has concluded that this increased activity should not be approved to proceed to the permitting stage at this time. The Board's determination recognizes the comments of Intervenor, community members and the results of the NIRB's monitoring of the Mary River Project under Project Certificate No. 005, all identifying concerns about the adequacy of impact predictions and uncertainty about the effectiveness of the mitigation measures proposed by Baffinland to address the potential for adverse effects associated with the proposed increase in road traffic and marine vessel traffic. More specifically, the Board noted:

- Baffinland did not demonstrate that the potential impacts of increased shipping raised by Intervenor and community members, such as disturbance to marine mammals, birds and fish populations and adverse effects on harvesting in the areas adjacent to Pond Inlet would be effectively monitored, mitigated and managed; and
- Baffinland did not demonstrate how dust generated from the proposed increase in vehicular traffic along the Tote Road would be minimized to limit the potential for effects on the quality of adjacent freshwater/marine areas/sea ice and the terrestrial environment in general, how dispersal towards communities would be prevented, and what mitigation strategies would be employed if effects were observed to be greater than predicted.

Consequently, the Board concluded that the increased trucking and shipping aspects of the Production Increase Proposal should not be approved to proceed as these activities could result in adverse ecosystemic effects beyond what was previously considered by the NIRB during the Board's Review of the original Mary River Project (2012) and the subsequent Early Revenue Phase Proposal (2014).

The Board notes that further assessment of another proposal to increase the amount of iron ore extracted, hauled and shipped via Milne Inlet under a modification request known as the "Phase 2 Development" Project Proposal is currently underway, and the FEIS Addendum for that proposal

was received by the NIRB on August 23, 2018. As noted in the cover letter to the relevant Minister accompanying this Reconsideration Report and Recommendation, the Board's conclusions in respect of the Production Increase Proposal in no way predetermines or otherwise limits the outcome of the Board's future assessment and decision-making associated with the Phase 2 Development Project Proposal, which will be considered subsequently.

In closing, the Board would like to thank all parties for conducting their consideration of the Production Increase Proposal on an expedited basis in an effort to preserve timelines identified as critical to Baffinland and reflecting construction and seasonal shipping constraints. In particular, the Board thanks the community of Pond Inlet, the Qikiqtani Inuit Association and Baffinland for providing support to the Board during the successful conduct of the Community Information Session on July 12, 2018.

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viii

SOMMAIRE

Le 30 avril 2018, la Baffinland Iron Mines Corporation (Baffinland ou le promoteur) a soumis à la Commission d'aménagement du Nunavut (la CAN ou la Commission) et à la Commission du Nunavut chargée de l'examen des répercussions (CNER ou la Commission), une « proposition de modification d'hébergement au port Milne, de stockage de carburant et d'augmentation de la production », (Proposition d'augmentation de la production), modification proposée à la mine de fer de la Mary River, située dans la région de Qikiqtani au Nunavut et régie par le certificat de projet no. 005 de la CNER (tel que modifié). Le 18 mai 2018, la CNER a reçu un renvoi de la CAN pour un examen de cette proposition d'augmentation de production; la Commission a ensuite décidé que l'évaluation de cette proposition serait effectuée par réexamen des modalités et conditions du certificat de projet no.005, tel que visé à l'alinéa 12.8.2. de l'article 12 *l'Accord entre les Inuit de la région du Nunavut et sa Majesté la Reine du Chef du Canada (l'Accord du Nunavut)* et à l'article 112 de la *Loi sur l'aménagement du territoire et l'évaluation des projets au Nunavut*, L.C. 2013, ch. 14, art. 2 (LATEPN).

La proposition d'augmentation de la production regroupait trois changements importants au projet de mine de fer de la Mary River :

- L'installation d'un nouveau camp au port du bras de mer Milne pour loger 380 personnes.
- L'ajout d'un réservoir de carburant diesel de 15 millions de litres (ML) au port Milne; et
- Une augmentation du volume de minerai qui passerait des 4,2 millions de tonnes de minerai actuellement autorisé par an (Mt/a) à 6 Mt/a et serait transporté par camion sur le chemin d'approvisionnement du bras de mer Milne, depuis le site de la mine de fer de la Mary River jusqu'au port Milne; le minerai serait ensuite expédié par bateau à partir de ce port pendant la saison des eaux libres.

La Baffinland a également demandé que la CNER réexamine et modifie les conditions 179(a) et 179(b) du certificat de projet no. 005 limitant le volume total de minerai pouvant être transporté par camion sur la route d'approvisionnement et expédié à partir du port du bras de mer Milne, pendant chaque année civile.

Au cours de la procédure de réexamen, le personnel de la CNER a organisé une session d'information communautaire qui a eu lieu le 12 juillet 2018 à Pond Inlet, la collectivité la plus directement touchée par la proposition. Les commentaires, questions et préoccupations formulées pendant cette session ont été résumés et transmis à la CNER aux fins d'attention. En se basant sur la portée et l'ampleur de la proposition d'augmentation de production et sur la rétroaction des parties intéressées, la CNER a jugé inutile d'organiser une audience publique pour justifier sa prise de décisions vis-à-vis de cette évaluation.

Tel que détaillé plus amplement dans le rapport de réexamen, l'évaluation des possibles répercussions écosystémiques et socioéconomiques de la proposition d'augmentation de production a été instruite par l'examen de la CNER de :

- La proposition d'augmentation de la production, l'addenda de l'énoncé final des répercussions environnementales (Addenda à l'EFRE) et les réactions de la Baffinland aux commentaires formulés;

- Les commentaires soumis par les intervenants et les membres des communautés pendant l'examen de la proposition par la CNER, y compris les mémoires écrits envoyés en juillet par les parties concernées;
- Les préoccupations manifestées par la population lors de la session d'information communautaire du mois de juillet à Pond Inlet; et
- Les résultats de la surveillance du projet de mine de fer de la Mary River, effectuée par la CNER (2013 à 2018).

La Commission a conclu que les deux activités suivantes, visées dans la proposition d'augmentation de production, pouvaient être autorisées à passer à la phase d'obtention des permis:

- L'ajout d'un réservoir de carburant diesel 15 ML à l'installation de stockage du carburant existant au port du bras de mer Milne; et
- L'installation d'un nouveau camp au port Milne pour loger 380 personnes.

La Commission a conclu qu'aucun changement ne serait apporté aux actuelles modalités et conditions du certificat de projet no.005 ni/ou au programme de surveillance en vigueur, nécessaire pour que ces activités soient réalisées en totale conformité aux objectifs prévus à l'alinéa 12.2.5 de l'article 12 de *l'Accord du Nunavut*.

En ce qui a trait à « l'augmentation de la production » qui impliquerait, si approuvée, que le plafond actuel de 4.2 millions de tonnes de minerai par an (Mt/a) s'élève à 6 Mt/a de minerai transporté par le chemin d'approvisionnement et expédié à partir du port Milne, la CNER a décidé de ne pas l'autoriser à passer à la phase d'obtention des permis. Cette décision de la Commission a été instruite par les commentaires des intervenants et des membres des collectivités ainsi que par les résultats de la surveillance du projet de mine de fer de la Mary River, effectuée par la CNER au titre du certificat de projet no.005. La disparité entre la justesse des prévisions de répercussions et l'incertitude relative à l'efficacité des mesures d'atténuation proposées par la Baffinland pour minimiser les effets négatifs liés à l'augmentation anticipée du trafic routier et maritime, a soulevé de nombreuses inquiétudes. Et plus particulièrement, la Commission a constaté que:

- La Baffinland n'avait pas prouvé que les effets probables de l'augmentation du trafic maritime, mentionnés par les intervenants et les membres des collectivités, notamment la perturbation des populations de mammifères marins, d'oiseaux et de poissons ainsi que les incidences négatives sur les récoltes dans les aires adjacentes à Pond Inlet, seraient efficacement surveillées, atténuées et gérées; et
- La Baffinland n'avait pas prouvé que la poussière générée par l'augmentation proposée de trafic routier sur le chemin d'approvisionnement, serait minimisée afin d'en limiter les effets éventuels sur la qualité des zones marines, dulcicoles et de glace marine adjacentes ou sur l'environnement terrestre en général; elle n'avait pas démontré comment la propagation de la poussière vers les collectivités serait empêchée et quelles stratégies d'atténuation seraient appliquées si les effets observés excédaient les effets prévus.

Par conséquent, la Commission a conclu que la composante « augmentation du transport par camion et par bateau » de la proposition ne devrait pas être approuvée car ces ouvrages pourraient

provoquer des effets écosystémiques négatifs, excédant les effets pris en compte par la CNER lors de son examen approfondi du projet de la Mary River (2012) et de son évaluation de la modification de phase de revenu initial (2014).

La Commission souligne d'autre part que l'évaluation approfondie d'une autre proposition visant à augmenter le volume de minerai de fer extrait, transporté par camion et expédié par voie maritime via le bras de mer Milne, déposée comme demande de modification sous le nom de « Développement de la phase 2 » est actuellement en cours et que l'addenda de l'EFRE de cette proposition a été reçu le 23 août 2018. Tel que déclaré dans la lettre d'accompagnement du rapport de réexamen et recommandations, adressée au(x) ministre (s) compétent(s), les conclusions de la Commission vis-à-vis de la proposition d'augmentation de production ne préjugent aucunement ni ne limitent en aucune manière les résultats de l'évaluation et la prise de décision futures de la proposition de projet de développement de la phase 2 qui sera examinée ultérieurement.

En terminant, la Commission tient à remercier toutes les parties d'avoir examiné aussi rapidement la proposition d'augmentation de production, afin de respecter les échéances jugées cruciales par la Baffinland en raison de la construction et des contraintes saisonnières de navigation. La Commission aimerait plus particulièrement remercier la collectivité de Pond Inlet, la Qikiqtani Inuit Association et la Baffinland de leur aide et de leur soutien lors de la fructueuse session d'information communautaire du 12 juillet 2018.

COVER LETTER



NIRB File No.: 08MN053

August 31, 2018

The Honorable Dominic LeBlanc, P.C.
Minister of Intergovernmental Affairs, Northern Affairs and Internal Trade
Crown-Indigenous Relations and Northern Affairs Canada
House of Commons
Ottawa, ON K1A 0A6

Sent via email and courier: dominic.leblanc@parl.gc.ca

Re: Reconsideration Report and Recommendations of the Nunavut Impact Review Board Regarding a Significant Modification to the Mary River Iron Mine Project as Proposed by Baffinland Iron Mines Corporation under the “Production Increase Proposal”

Dear Honourable Dominic LeBlanc:

As set out in the Nunavut Impact Review Board’s (NIRB or Board) Notice of Reconsideration sent to the relevant Minister on June 11, 2018, in support of the Board’s reconsideration of the terms and conditions of existing Project Certificate No. 005 for the Mary River Iron Mine Project under Article 12, Section 12.8.2 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 112 *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*), the NIRB has undertaken an assessment of the Production Increase Proposal submitted by Baffinland Iron Mines Corporation that proposes modification to the previously approved Mary River Iron Mine Project in the Qikiqtani Region of Nunavut. As required by Article 12, Section 12.8.3 of the *Nunavut Agreement* and s. 112(5) of *NuPPAA*, the NIRB is providing this Reconsideration Report and Recommendations to the Minister for your consideration.

The enclosed Reconsideration Report and Recommendations summarizes the NIRB’s assessment of the potential ecosystemic and socio-economic effects of the Production Increase Proposal and concludes that only two of the three aspects of the Production Increase Proposal should be allowed to proceed to the permitting stage at this time. Specifically, the Board has concluded that the following

two activities, should be approved to proceed to the permitting stage without further assessment by the NIRB:

- The addition of a 15 ML diesel fuel tank to the existing Fuel Storage Facility at Milne Port; and
- The installation of a new 380-person accommodations camp at Milne Port.

With respect to the aspect of the Production Increase Proposal that, if approved, would allow for an increase to the existing limit on the amount of ore extracted from the Mary River Mine and hauled via the Tote Road and shipped from Milne Port of 4.2 million tonnes per year (Mt/a) to 6 Mt/a, based on all submissions about the Production Increase Proposal received from the parties to date, including comments provided to the NIRB staff during a Public Information Session held in Pond Inlet on July 12, 2018, the NIRB has concluded that this increased activity should not be approved to proceed to the permitting stage at this time. As reviewed in greater detail in the attached Reconsideration Report and Recommendations, the Board reached this conclusion based on concerns, shared by Intervenor and residents of Pond Inlet, that there was potential for the proposed increase to result in adverse ecosystemic effects beyond what was previously considered by the NIRB during the Board's Review of the original Mary River Project (and the associated Early Revenue Phase Proposal) and that these potential effects cannot be adequately mitigated and/or managed with the measures proposed by Baffinland.

In arriving at this decision, the Board acknowledges that a request to increase the amount of iron ore extracted, hauled and shipped via Milne Inlet will be assessed by the NIRB in future, as proposed under a modification request known as the "Phase 2 Development" Project Proposal referred to the NIRB by the Nunavut Planning Commission in May 2018. The FEIS Addendum for the Phase 2 Development Project Proposal was received by the Board from Baffinland on August 23, 2018 and the next steps in the Board's assessment of this proposal will get underway following the issuance of this Reconsideration Report and Recommendations. The Board emphasizes that the Board's conclusions in respect of the Production Increase Proposal are solely based on the scale and scope of the activities proposed in the Production Increase Proposal and the information and comments provided in respect of those activities. The Board's conclusions in respect of the assessment of the Production Increase Proposal in no way predetermines or otherwise limits the outcome of the Board's future assessment and decision-making associated with the Phase 2 Development Project Proposal.

Should you have questions or require clarification regarding this matter, please contact the NIRB's Executive Director, Ryan Barry at (867) 983-4608 or rbarry@nirb.ca.

Sincerely,



Elizabeth Copland
Chairperson
Nunavut Impact Review Board

cc: The Honourable Catherine McKenna, Minister of Environment and Climate Change
The Honourable Jonathan Wilkinson, Minister of Fisheries and Oceans and the Canadian Coast Guard
The Honourable Marc Garneau, Minister of Transport
The Honourable Amerjeet Sohi, Minister of Natural Resources Canada
The Honourable Hunter Tootoo, MP for Nunavut
Aluki Kotierk, President, Nunavut Tunngavik Incorporated
P.J. Akeeagok, President, Qikiqtani Inuit Association
Lootie Toomasie, Chairperson, Nunavut Water Board
Megan Lord-Hoyle, Baffinland Iron Mines Corporation
Lou Kamermans, Baffinland Iron Mines Corporation
Mary River Distribution List

TABLE OF CONTENTS

INSIDE COVER PAGE	i
SIGNATURE PAGE	ii
EXECUTIVE SUMMARY	iii
COVER LETTER.....	xii
TABLE OF CONTENTS	xv
LIST OF TABLES.....	xvi
1. INTRODUCTION	1
1.1 Purpose of this Report.....	1
1.2 The NIRB's Assessment of the Production Increase Proposal in the Context of the Original Mary River Project.....	1
1.3 The Production Increase Proposal.....	4
1.4 Board Guidance to Proponent in Preparation of Impact Assessment of Production Increase Proposal	9
1.5 Procedural History	10
1.6 Evidentiary Issues	13
2. PROPONENT'S ASSESSMENT OF THE PRODUCTION INCREASE PROPOSAL	15
2.1 Project Description.....	15
2.2 Potential Changes to Ecosystemic Effects	15
2.3 Potential Changes to Socio-Economic Effects.....	18
2.4 Baffinland's Response to The Comments and Concerns of Other Parties	19
3. SUMMARY OF INTERVENOR SUBMISSIONS	21
4. CONSULTATION OPPORTUNITIES.....	24
4.1 Public Consultation	24
5. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS OF THE BOARD.....	26
5.1 Ecosystemic Effects	26
5.2 Socio-Economic Effects.....	29
6. RECOMMENDATION TO THE MINISTER	31
7. RECOMMENDATIONS REGARDING CHANGES TO EXISTING PROJECT MONITORING OR PROJECT CERTIFICATE TERMS AND CONDITIONS.....	32
7.1 Changes to the NIRB's Monitoring Program.....	32
APPENDIX A LIST OF ACRONYMS	A-1
APPENDIX B COMMUNITY INFORMATION SESSION.....	A-1

LIST OF TABLES

TABLE 1: SCOPE OF PRODUCTION INCREASE PROPOSAL AS COMPARED TO CURRENT OPERATIONS.....	8
TABLE 2: SCALE OF MODIFICATIONS IN RELATION TO CURRENT OPERATIONS	9
TABLE 3: PROCEDURAL HISTORY	10
TABLE 4: SUMMARY OF ECOSYSTEMIC CHANGES IN PROJECT INTERACTIONS AND FACTORS RELATING TO SIGNIFICANCE.....	16
TABLE 5: SUMMARY OF SOCIO-ECONOMIC CHANGES IN PROJECT INTERACTIONS AND FACTORS RELATING TO SIGNIFICANCE.....	19
TABLE 6: SUMMARY OF COMMENTS RECEIVED FROM PARTIES IN FINAL WRITTEN SUBMISSION.....	21
TABLE 7: SUMMARY OF KEY ISSUES RAISED DURING THE COMMUNITY INFORMATION SESSION	25

LIST OF FIGURES

FIGURE 1: PROJECT LOCATION MAP, FEIS ADDENDUM, ATTACHMENT 1 FIGURE 1	7
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1. INTRODUCTION

1.1 Purpose of this Report

As set out under s. 112(5) of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*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.

This Reconsideration Report and Recommendations summarizes the information provided to the Board from the Proponent, Intervenors and residents of Pond Inlet throughout the Board’s assessment of the “Production Increase, Fuel Storage and Milne Port Accommodations Modification Proposal” (Production Increase Proposal), conducted during the Board’s reconsideration of the existing Terms and Conditions of Project Certificate No. 005 (as amended) for Baffinland Iron Mines Corp.’s (Baffinland) Mary River Iron Mine Project. This Report also includes the Board’s recommendations regarding whether or not the Production Increase Proposal if conducted in accordance with the existing Terms and Conditions of Project Certificate No. 005, or modified Terms and Conditions is consistent with the objectives of the *Nunavut Agreement* and the *NuPPAA* and should be allowed to proceed to the licensing phase.

1.2 The NIRB’s Assessment of the Production Increase Proposal in the Context of the Original Mary River Project

1.2.1 The NIRB’s Approach to Assessing Modifications to Previously Approved Projects

As described in more detail in the text below, the Mary River Project, as currently operated, differs markedly from the original Mary River Project as envisioned by Baffinland and assessed by the NIRB from 2008-2012. The text that follows provides background regarding the original Mary River Project and the subsequent modifications submitted by Baffinland for the Board’s consideration. In determining to determine the process and procedure guiding NIRB’s assessment of any modification proposal, the Board must consider the following:

- Is the proposed modification included within the scope of the original project as previously assessed by the NIRB;
- Does the proposed modification constitute a significant modification to the original project that is integrally-linked to the original project (or project as subsequently modified by any

modification proposals that have been assessed and approved by the NIRB, such as the amendment to Project Certificate No. 005 to reflect the Early Revenue Phase Proposal); and

- Does the proposed modification constitute a significant modification to the original project that is not integrally-linked to the original project, and that has sufficient scope to be assessed as an independent project proposal?

The text that follows provides the background context of the original Mary River Project and the subsequent modification requests necessary to understand the Board's approach to assessing the Production Increase Proposal and associated reconsideration of terms and conditions in Project Certificate No. 005.

1.2.2 The Original Mary River Project

The original Mary River Project as approved by the NIRB in December 2012, and operated by Baffinland, involved the development of an open pit iron ore mine on northern Baffin Island, and associated infrastructure that includes the use of an existing Tote Road between Milne Inlet and a mine site at Mary River, ports at Milne Inlet and Steensby Inlet, and a railway connecting the mine site to the Steensby Port. As originally proposed, iron ore would have been transported from the mine site via a railway south to the port at Steensby Inlet. Year-round shipping of the iron ore would be through Foxe Basin and Hudson Strait to markets in Europe, using custom designed ice-breaking ore carriers. Since the issuance of the Mary River Project Certificate No. 005 on December 28, 2012, significant elements of the original Mary River Project have not been constructed, although these remain authorized under Project Certificate No. 005, including: the port at Steensby Inlet, the railway from the mine site to Steensby Inlet, and the fleet of purpose-built ice-breaking ore carriers.

1.2.3 Modification of the Original Project Under the Early Revenue Phase Proposal

In January 2013, Baffinland applied for a modification to the original Mary River Project, as approved, seeking to amend specific project components and activities to support limited mining activity to commence prior to the construction of the railway and full facilities at the Steensby Port. Specifically, Baffinland proposed to use the Milne Inlet Tote Road to transport a smaller volume of ore to Milne Port for shipment during the open water season only, with development of the railway, Steensby Port and fleet of purpose-built ore carriers to be delayed until shipments through Milne Inlet had generated sufficient revenue to support subsequent development (the Early Revenue Phase Proposal). Consequently, the Early Revenue Phase Proposal changed the shipping route from the southern route through Foxe Basin to a northern route through Eclipse Sound. Following the NIRB's assessment of the Early Revenue Phase Proposal, the project as modified was approved to proceed and Mary River Project Certificate No. 005 was subsequently amended and re-issued on May 28, 2014.

While the consideration of the Phase 2 Development Proposal remained ongoing, on November 8, 2017 Baffinland submitted a "Tote Road, Camp, and Fuel Upgrade" proposal to the NIRB for consideration. The scope of this proposal included proposed upgrades to the existing Tote Road

to address road safety and operational issues, addition of a 15 ML fuel tank to the existing Fuel Storage Facility at Milne Port and the installation of a new 280-person accommodations camp at the Milne Inlet Port. Following a cursory review of the associated documentation, the NIRB determined that Baffinland had not demonstrated that the proposed activities were separate and distinct from the Phase 2 Development Proposal. On November 17, 2017 the NIRB issued correspondence directing Baffinland to modify and resubmit its proposal once it was able to demonstrate that the proposed activities were independent of and not integrally linked to the Phase 2 Development Proposal, and further noted that sufficient supporting information would be required to assess those proposed works not previously considered by the NIRB.

1.2.4 Proposed Modification of the Project Under the Phase 2 Development Proposal

Soon after receiving approval for the Early Revenue Phase Proposal, on October 29, 2014 Baffinland submitted the “Phase 2 Development Proposal” for the Mary River Iron Mine to the Nunavut Planning Commission (NPC or Commission) for consideration;¹ the NIRB subsequently received this proposal for assessment on July 13, 2015. The Phase 2 Development Proposal included construction of the following activities in addition to the activities associated with the original Mary River Project and the Early Revenue Phase Proposal:

- Changing marine transport of ore from year round shipping to shipping six months of the year (July 01 to December 31), with a focus on shipping ore primarily during the open water season;
- Associated changes at the Milne Port site to maximize shipping during the open water season which would include increases to the size of the proposed second ore dock and ship loader to accommodate cape-sized vessels;
- Reducing the amount of proposed fuel storage at the Milne Port site; and
- The installation of an enclosed ore crushing facility at the Milne Port site.

While the NIRB’s consideration of the Phase 2 Development Proposal was underway, the scope of the application was further modified by Baffinland to add a proposed northern rail component between the existing Mary River Mine site and the existing facilities at the Milne Port site. This significant modification while the assessment was ongoing resulted in the proposal being referred back to the NPC for further consideration on December 19, 2016; the Phase 2 Development Proposal was formally referred back to the NIRB for assessment on May 29, 2018. The current scope of the Phase 2 Development Proposal includes the following proposed works and activities:

¹ Public Registry ID: 291213 & 291214

1. Increase in iron ore production and transportation from 4.2 Million tonnes per year (Mt/a) under the Early Revenue Phase of the Mary River Project to 12 Mt/a via the northern transportation corridor.
2. Construction and operation of a 110 km railway within the Mary River Transportation Corridor between the mine site and Milne Port, generally following the existing Tote Road. Once the railway is in place the Tote Road will remain operational, but its use by Baffinland will drop substantially and the use of the Tote Road would be limited to moving personnel and key goods.
3. Expansion and improvement of the Milne Port facilities. A second ore dock would be added to accommodate cape-sized vessels; a second ship loader, railway unloading and maintenance facilities, and additional support infrastructure would be developed, in addition to an enclosed crushing facility.
4. Modification of the shipping season. The ore shipping season is proposed to be from July 1 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. It is noted that winter sealift is no longer included in the Phase 2 Proposal, because on October 24, 2017, due to concerns expressed by the communities regarding ice breaking, Baffinland removed the winter sealift component from the original application.
5. Expansion of the existing accommodation camp at the Mine site.

On August 23, 2018 a Final Environmental Impact Statement Addendum (FEIS Addendum) in support of the Phase 2 Development Proposal was submitted to the NIRB by Baffinland, however the assessment of the Phase 2 Development Proposal remains *suspended* until the Board's consideration of the Production Increase Proposal has concluded. The Board highlights that the NIRB's decision and recommendations in respect of the Production Increase Proposal in no way predetermines or otherwise limits the outcome of the Board's future assessment and decision-making associated with the Phase 2 Development Project Proposal, which will be considered subsequently by the Board.

1.3 The Production Increase Proposal

On December 8, 2017, the NIRB received correspondence from Baffinland providing notice that it anticipated that its 2017 road haulage operations would meet and potentially exceed (by 5-7%) the 4.2 Mt/a limit established by Term and Condition 179(b) of the Mary River Project Certificate No. 005. On December 12, 2017 the NIRB acknowledged receipt of the update and noted additional reporting would be required from Baffinland once final haulage numbers for 2017 were confirmed, including an analysis of potential ecosystemic and socio-economic effects related to any exceedance of road haulage activities from those predicted or permitted. The NIRB encouraged Baffinland to submit an application to amend Term and Condition 179(b) of the Mary River Project Certificate should it identify any challenges with complying in future. Baffinland later confirmed the actual tonnage of ore hauled in 2017 was 4.54 Mt, representing an approximately 7.5% exceedance of the limit specified in the Project Certificate.

In early April 2018, Baffinland indicated informally to the NIRB that based on 2018 production rate predictions the current limit of 4.2 Mt/a would be reached by October because of increased efficiencies in operations at the mine. Baffinland also indicated that if production limits were reached prior to the end of the year and mining operations would therefore need to cease to comply with the limits in the Project Certificate, there would be adverse impacts to employees and contractors as well as interruption to other direct and indirect benefits of the Mary River Project. Baffinland also noted that an increase in ore production and shipment would allow Baffinland to better sustain relationships with existing markets, thus capitalizing on the demand for ore, which would contribute to the long-term viability of the Mary River project.

Consequently, the “Production Increase, Fuel Storage and Milne Port Accommodations Modification Proposal” (Production Increase Proposal), was submitted to the NIRB by Baffinland on April 30, 2018. The Production Increase Proposal would involve an increase in the maximum volume of ore that would be permitted to be trucked from the Mary River site to the Milne Port via the Tote Road from 4.2 million tons per year (Mt/a) to 6 Mt/a, as well as the addition of a 15 ML diesel fuel tank within the existing Fuel Storage Facility at Milne Port, and installation of a new 380-person accommodation at Milne Port. To accommodate these changes, Baffinland requested that the NIRB amend Conditions 179(a)² and 179(b)³ of the Mary River Project Certificate No. 005. Baffinland noted the purpose of the Production Increase Proposal is to:

- Install new accommodations to address high employee turnover due to the current conditions of Baffinland’s Milne Inlet accommodations;
- Increase fuel stored at Milne Inlet required to maintain operations and prepare for proposed future phases of the project; and
- Increase the volume of ore transported by truck to reduce the risk of having to cease road haulage early in the year if operations reached maximum extraction levels.

As noted in the Board’s correspondence of June 11, 2018, when a Proponent requests modifications to a previously-approved Project, the Board’s process for assessing subsequent modifications can vary considerably to reflect the nature, scale and scope of the modifications. Specifically, with respect to the Production Increase Proposal, the Board considered the following factors to select the appropriate process to assess the potential ecosystemic and socio-economic effects of Baffinland’s proposed modifications:

1. Is the Production Increase Proposal included within the scope of the previously assessed Mary River Project (including as modified by the Early Revenue Phase Project Proposal)?

² In any given calendar year, the total volume of ore shipped via Milne Inlet shall not exceed 4.2 million tonnes.

³ In any given calendar year, the total volume of ore transported by truck on the Milne Inlet Tote Road shall not exceed 4.2 million tonnes.

2. Is the Production Increase Proposal integrally-linked to the Mary River Project, and/or should the modification proposal be characterized as within the scope of the Phase 2 Development Proposal currently being assessed by the Board?
3. If the Production Increase Proposal is integrally linked to the Mary River Project, do the modifications proposed warrant reconsideration of the terms and conditions in Project Certificate No. 005?

On the basis of the Board's consideration of these factors, including the comments of parties received by the Board on these issues, the NIRB determined that the Production Increase Proposal was not included within the scope of the previously assessed Mary River Project (as modified under the Early Revenue Phase Project Proposal), that the proposed modifications could be considered independently from the Phase 2 Development Proposal and that it was appropriate to conduct the assessment of the Production Increase Proposal in an expedited fashion without a Public Hearing.

River Project, and shipping from Milne Inlet only occurring during the previously approved open water period, Baffinland predicted that the Production Increase Proposal would not result in any significant ecosystemic and socio-economic effects.

Table 1 below compares the scope of the Production Increase Proposal against that of the currently approved operations for the Mary River Project and describes the extent to which the modifications to the Mary River Project would comply with relevant conditions in the existing Project Certificate No. 005 or would require changes.

Table 1: Scope of Production Increase Proposal as Compared to Current Operations

Component	Comparison to Current Operations under the Approved Project	Project Certificate Amendment
Mine Site Operation	Activities at the mine site (loading, movement of ore, crushing, screening) would not change.	Change not required.
Mining Rate	Extraction would increase from 4.2 Mt/a to 6 Mt/a from the open pit mine at the Mary River site	Change not required.
Ground Transportation of Ore to Milne Port	Volume of ore trucked from Mary River to Milne Port on the Tote Road would increase from 4.2 Mt/a to 6 Mt/a.	Amendment required: Condition 179(a) states that the total volume of ore transported by truck on the Tote Road shall not exceed 4.2 Mt/a.
Marine Shipping of Ore from Milne Port	Volume of ore shipped to market from Milne Port would increase from 4.2 Mt/a to 6 Mt/a.	Amendment required: Condition 179(b) states that the total volume of ore shipped via Milne Inlet shall not exceed 4.2 Mt/a.
Milne Port Site Operation	Activities at the mine site (stockpiling, water management, docks, ore management) would not change.	Change not required.
Milne Port Camp	Installation of a new 380-person camp at Milne Port, with decommissioning of some existing accommodation structures.	Change not required.
Milne Port Fuel Tank Farm	The addition of a 15 ML diesel fuel tank within the existing Fuel Storage Facility at Milne Port	Change nor required

Further, Table 2 provides additional context and scale to key operations and proposed changes included in this Production Increase Proposal, as they compare to the previously approved Mary River Project.

Table 2: Scale of Modifications in Relation to Current Operations

Component	ERP	2017	2018(approved)	Proposed Production Increase
Ore Extraction (Mt/a)	3.5	4.6	4.2	6
No. of ships (tonnage MT)	55 (4.2 MT)	56 (4.1 MT)	58 (4.2MT)	83 (6MT)
Annual Fuel required (ML)	32	63		86
Fuel Storage (ML)	61	48	51	86
Accommodations (Milne and Mary River)	1370	715	1515	1514
Ave. daily traffic (one-way)	Ore transit: 152 Other:30	Ore transit: 196 Other: 32	Ore transit: 179 Other: 30	Ore Transit: 236 Other: 40

Within the Production Increase Proposal, Baffinland highlighted its need for a determination and associated recommendations to be provided by the NIRB to the Responsible Minister by August 31, 2018 to make the 2018 shipping component of the modified proposal possible. Indicating its belief that its requested assessment timeline conforms to the direction provided in the *Nunavut Agreement*, the *NuPPAA* and the intent NIRB's Rules of Procedure (September 3, 2009), Baffinland further noted its need for operational flexibility to be accommodated "as it endeavors to evolve and advance the Mary River project to the mutual benefit of North Baffin communities".

1.4 Board Guidance to Proponent in Preparation of Impact Assessment of Production Increase Proposal

In correspondence issued on June 11, 2018 the Board provided notice that it considered the changes proposed in the Production Increase Proposal to constitute a significant modification of the original Mary River Project (as amended) and requested the submission of additional information from Baffinland to constitute a Final Environmental Impact Statement submission (FEIS Addendum) in support of the Production Increase Proposal. The Board further noted it expected updated impact predictions to be provided for the proposed project components and activities to reflect the contributions of the additional activities described in the Production Increase Proposal to the effects of the approved Mary River Project with discussion of whether predictions and associated monitoring, mitigation and residual effects remain consistent with the analysis provided in the FEIS and FEIS Addendum previously supplied for the Mary River Project Proposal and the associated Early Revenue Phase (ERP) Proposal. The Proponent was further encouraged to demonstrate how its monitoring results and experience gained in operating the approved Mary River Project to date have informed its development of the Production Increase Proposal.

1.5 Procedural History

1.5.1 Key Procedural Steps in the Reconsideration

Table 3: Procedural History

Party	Timeline	Process Steps	Notes
Nunavut Planning Commission (NPC) and Nunavut Impact Review Board (NIRB)	April 30, 2018	Baffinland submitted the Production Increase Proposal under Article 12, Section 12.8.2 of the <i>Nunavut Agreement</i> and s. 112 of the <i>NuPPAA</i> .	Baffinland requested that NIRB reconsider Mary River Project Certificate No. 005 and amend Conditions 179(a) ⁴ and 179(b) ⁵ to accommodate an increase in the volume of ore transported and shipped out of Milne Port.
NIRB	May 18, 2018	Received referral from NPC to assess the Production Increase Proposal	
NIRB	June 11, 2018	Board issued correspondence determining that <i>"the modifications proposed in the Production Increase Proposal require assessment through a formal reconsideration of these specific Project Certificate terms and conditions"</i> [Conditions 179(a) and 179(b)]	NIRB requested Baffinland submit additional information, a Final Environmental Impact Statement Addendum (FEIS Addendum) in support of the Production Increase Proposal.
Baffinland	June 20, 2018	FEIS Addendum submitted to the NIRB	
NIRB	June 27, 2018	Accepts FEIS Addendum and invites parties to submit technical review comments	Parties directed to consider: <ul style="list-style-type: none"> the scale and scope of the proposed modifications; the on-going public engagement initiatives of Baffinland and the Qikiqtani Inuit Association in respect of the Project in general and the Production Increase Proposal specifically; and noting that the NIRB was hoping to conduct a community information session in Pond Inlet in mid-July prior to the close of the comment period, the Board proposed processing of the Production Increase Proposal without conducting a Public Hearing.

⁴ In any given calendar year, the total volume of ore shipped via Milne Inlet, shall not exceed 4.2 million tonnes.

⁵ In any given calendar year, the total volume of ore transported by truck on the Milne Inlet Tote Road shall not exceed 4.2 million tonnes.

Table 3: Procedural History

Party	Timeline	Process Steps	Notes
NIRB	July 12, 2018	NIRB held a Public Information Session in Pond Inlet. In addition to the information provided directly in response to the Production Increase Proposal, the NIRB was also able to rely on information provided through previous assessments, ongoing project monitoring, and materials submitted by Baffinland and the Qikiqtani Inuit Association (QIA) resulting from their public engagement while preparing the Production Increase Proposal.	During the session, the NIRB staff received feedback regarding the Production Increase Proposal on the following topics: <ul style="list-style-type: none"> ▪ Shipping activities ▪ Increased dust emission ▪ Economic benefit/employment ▪ Adverse effects on Inuit harvesting from project shipping ▪ Disturbance to marine mammals ▪ Changes in sea ice quality from dust deposition
Parties	July 26, 2018	Submission of comments	Comments received from the Qikiqtani Inuit Association (QIA), Government of Nunavut (GN), Crown – Indigenous Relations and Northern Affairs Canada (CIRNAC), Environment and Climate Change Canada (ECCC), Fisheries and Oceans Canada (DFO), Parks Canada (PC), Transport Canada (TC), World Wildlife Fund (WWF), Malachi Arreak
Qikiqtani Inuit Association (QIA)	August 3, 2018	Following the NIRB's information session, the QIA sent a letter to the NIRB to inform the Board of its agreement with Baffinland, termed the "Project Stabilization Approach", intended to manage outstanding concerns raised by community stakeholders through a commitment list.	QIA identified 33 concerns on the following topics: <ul style="list-style-type: none"> ▪ Marine shipping ▪ Dust ▪ Management Plans ▪ Water Compensation Agreement ▪ Inuit Owned Lease ▪ Roads Management Plan ▪ IIBA Implementation ▪ IIBA Renegotiation
Parties	August 9, 2018	Submission of response to parties' comments	
NIRB	August 21, 2018	NIRB issued correspondence to all parties	Advised of the Board's determination that a Public Hearing was not required to support the Board's reconsideration of Project Certificate No. 005 associated with the Production Increase Proposal

April 30, 2018 Baffinland submitted the Production Increase Proposal to the Nunavut Planning Commission and the NIRB under Article 12, Section 12.8.2 of the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and s. 112 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (NuPPAA).

On May 18, 2018 the NIRB received a referral from the NPC to screen the Production Increase Proposal.⁶ In the Production Increase Proposal, Baffinland requested that NIRB reconsider Mary River Project Certificate No. 005 and amend Conditions 179(a)⁷ and 179(b)⁸ in order to accommodate the increase in the volume of ore transported and shipped out of Milne Port. On June 11, 2018 the Board issued correspondence indicating that: *“the Board has decided the modifications proposed in the Production Increase Proposal require assessment through a formal reconsideration of these specific Project Certificate terms and conditions”* [Conditions 179(a) and 179(b)]. In the same correspondence, the NIRB requested the submission of additional information from Baffinland to provide a Final Environmental Impact Statement submission (FEIS Addendum) in support of the Production Increase Proposal.

On June 20, 2018 Baffinland filed additional information in support of the FEIS Addendum. On June 27, 2018, following a cursory review of the additional information the NIRB issued correspondence formally accepting the FEIS Addendum, and inviting comment on the FEIS Addendum from interested parties to be received on or before July 26, 2018. As outlined in the Board’s June 27, 2018 correspondence, recognizing:

- the scale and scope of the proposed modifications;
- the on-going public engagement initiatives of Baffinland and the Qikiqtani Inuit Association in respect of the Project in general and the Production Increase Proposal specifically; and
- noting that the NIRB was hoping to conduct a community information session in Pond Inlet in mid-July prior to the close of the comment period, the Board proposed processing of the Production Increase Proposal without conducting a Public Hearing.

In addition to the information provided directly in response to the Production Increase Proposal, the NIRB was also able to rely on information provided through previous assessments, ongoing project monitoring, and materials submitted by Baffinland and the Qikiqtani Inuit Association (QIA) resulting from their public engagement while preparing the Production Increase Proposal. Due to previous concerns raised by the community of Pond Inlet related to the Mary River project, the NIRB held a Public Information Session in Pond Inlet on July 12, 2018. During the session, the NIRB staff received feedback regarding the Production Increase Proposal on the following topics:

- Shipping activities
- Increased dust emission

⁶ Correspondence from G. Djalogue, NPC to N. Lear, NIRB et al., Re: NPC File No. 148841 [Production Increase, Fuel Tank and Milne Port Accommodations - Project Modification to Project Certificate No. 005 - 08MN053], May 18, 2018 at p. 2 (NPC, MTPA Referral Correspondence).

⁷ In any given calendar year, the total volume of ore shipped via Milne Inlet, shall not exceed 4.2 million tonnes.

⁸ In any given calendar year, the total volume of ore transported by truck on the Milne Inlet Tote Road shall not exceed 4.2 million tonnes.

- Economic benefit/employment
- Adverse effects on Inuit harvesting from project shipping
- Disturbance to marine mammals
- Changes in sea ice quality from dust deposition

Following the NIRB’s information session, the QIA sent a letter to the NIRB to inform the Board of its agreement with Baffinland, termed the “Project Stabilization Approach”, intended to manage outstanding concerns raised by community stakeholders through a commitment list. In total, the QIA identified thirty-three (33) concerns across eight topic areas:

- Marine shipping
- Dust
- Management Plans
- Water Compensation Agreement
- Inuit Owned Lease
- Roads Management Plan
- IIBA Implementation
- IIBA Renegotiation

After providing parties an opportunity between June 11, 2018 and July 26, 2018 to comment on Baffinland’s FEIS Addendum, the NIRB received final written submissions from the following parties:

- Qikiqtani Inuit Association (QIA)
- Government of Nunavut (GN)
- Crown – Indigenous Relations and Northern Affairs Canada (CIRNAC)
- Environment and Climate Change Canada (ECCC)
- Fisheries and Oceans Canada (DFO)
- Parks Canada (PC)
- Transport Canada (TC)
- World Wildlife Fund (WWF)
- Malachi Arreak

On August 9, 2018 the NIRB received Baffinland’s response to parties’ comments. On August 21, 2018, the NIRB issued correspondence to all parties advising that the Board had determined that a Public Hearing would not be required to support the Board’s reconsideration of Project Certificate No. 005 associated with the Production Increase Proposal.

1.6 Evidentiary Issues

1.6.1 The Burden and Standard of Proof

During the NIRB’s reconsideration process, the burden of establishing that the Production Increase Proposal can proceed rests with the Proponent. Essentially the onus was on Baffinland to demonstrate that the any anticipated adverse ecosystemic or socio-economic impacts and environmental effects of the Production Increase Proposal as conducted under the existing Terms

and Conditions of Project Certificate No. 005, and/or proposed revisions to Project Certificate No.: 005 can be prevented, mitigated or managed.

Throughout the Board's decision-making process, the onus remained on the Proponent to demonstrate that allowing the Production Increase Proposal to proceed in accordance with specific terms and conditions is consistent with the Board's mandate and requirements of the *Nunavut Agreement* and the *NuPPAA*.

1.6.2 The Precautionary Principle and Adaptive Management

As was the case in the Board's previous assessment of the original Mary River Project Proposal and the Early Revenue Phase Proposal, the Board recognizes that there are areas of the Production Increase Proposal for which there may be substantial gaps in data or uncertainty regarding predicted effects. In particular, the Board notes that even with the benefit of some monitoring data, considerable uncertainty exists regarding the effects the current project activities are having on marine mammals. In cases such as this, the Board expects that the "precautionary principle" will be actively applied, which essentially means that a lack of scientific certainty regarding effects will not be an excuse for inaction.

In practice, when the precautionary principle applies, as is the case with respect to the prediction of effects on the marine environment associated with the approved Mary River Project in combination with the added intensity of trucking and shipping associated with the Production Increase Proposal, it is the Proponent who bears the burden of proof to show that despite the uncertainty, the potential adverse environmental impacts can be mitigated or prevented.

As in the Board's previous assessments of the phases of the Mary River Project, in the face of uncertainty in terms of potential effects, the Board not only employs the precautionary principle, but has also uses adaptive management to integrate effects predictions with monitoring, mitigation and management functions. Under this adaptive management approach, the Board expects the Proponent to use monitoring data to evaluate, on an on-going basis, the effects predicted and the efficacy of mitigation and management developed and implemented to address all effects.

Throughout the Board's reconsideration associated with the Production Increase Proposal, the Proponent, Intervenor, the community members from Pond Inlet and the Board, via the Board's Monitoring Officers for the Mary River Project have considered and referenced the monitoring data and mitigation and management measures already in use at the Mary River Project to inform this assessment.

1.6.3 Inuit Qaujimaningit

The FEIS Addendum provided by Baffinland did not provide any clear evidence demonstrating how public consultation and Inuit Qaujimaningit/Qaujimajatuqangit, local knowledge and community knowledge have influenced the planning and design of the proposed activities and associated management plan updates. During the Community Information Session held in Pond Inlet in July, some community members expressed concern that information from local harvesters regarding reductions in the harvest of marine mammals in the surrounding area does not seem to have been considered by Baffinland in their adoption of mitigation measures for the existing Mary River Project or in their assessment of the Production Increase Proposal.

2. PROPONENT'S ASSESSMENT OF THE PRODUCTION INCREASE PROPOSAL

2.1 Project Description

As outlined in greater detail in Section 1.2.4 of this Reconsideration Report and Recommendations, the Production Increase Proposal would result in three key changes to the existing Mary River Project:

- The addition of a 15 ML diesel fuel tank to the existing Fuel Storage Facility at Milne Port;
- The installation of a new 380-person accommodations camp at Milne Port; and
- An increase from the existing limit of 4.2 Million tonnes per year (Mt/a) to 6 Mt/a in the amount of ore extracted from the Mary River Mine and hauled via the Tote Road and shipped from Milne Port.

2.1.1 Need for the Project

Due to increased efficiencies in operations at the mine, Baffinland currently predicts that by October 2018 it will have reached the current annual limit of 4.2 Mt/a of ore hauled on the Tote Road and shipped via Milne Inlet. Baffinland indicated that the Production Increase Proposal is being sought so that it does not have to cease mining operations in October when the 4.2 Mt/a hauling and shipping limit is anticipated to be reached, thereby avoiding adverse impacts to employees and contractors due to lay offs, and interruption in the business relationships with shippers and customers.

2.2 Potential Changes to Ecosystemic Effects

Noting that the Production Increase Proposal would not increase the existing footprint of the Mary River Project Development Area, and recognizing the applicability of existing effects monitoring, mitigation and management requirements of Project Certificate No. 005 to the additional activities, Baffinland concluded that there would be no changes to the potential for ecosystemic effects associated with the Production Increase Proposal.

Table 4 below is a summary of impact predictions, significance determinations, and reliance on existing monitoring or mitigation plans for the Mary River Project that was presented by Baffinland as its application for the Production Increase Proposal.

Table 4: Summary of Ecosystemic Changes in Project Interactions and Factors Relating to Significance⁹

Valued Ecosystemic Component	Potential Change in Effects from Mary River FEIS	Description of Change	Applicable Mitigation and Monitoring
Atmospheric Environment • Climate Change • Air Quality • Noise and Vibration	Change; not significant	<p>Additional ore processing, handling, stockpiling, and transporting activities, and the associated increases in truck and ship traffic and use of other mobile engine equipment, will result in emissions of greenhouse gases (GHGs), dust and other air constituents, noise, and vibration.</p> <p>However, additional releases of GHGs from the Project anticipated to remain small in comparison to Nunavut and Canadian totals and are not expected to have a measurable effect on global climate change. Current monitoring indicates dust is being successfully managed along the Tote Road; 2017 dustfall reduced with increased dust suppression efforts. Metal concentrations in vegetation and soil remain below Project thresholds. NO₂ and SO₂ levels are well below thresholds and increase in fuel combustion unlikely to result in exceedances.</p> <p><i>Potential changes to factors related to significance include increases in the magnitude and frequency. However, with existing mitigation, the environmental effects evaluated to remain not significant.</i></p>	Anticipated effects managed through monitoring, mitigation, and management practices: • Air Quality and Noise Abatement Management Plan • Dust Management Protocol • Terrestrial Environment Mitigation and Monitoring Plan
Terrestrial Environment • Vegetation • Terrestrial wildlife and habitat • Migratory birds and habitat	Change; not significant	<p>Additional Tote Road traffic may result in increased sensory disturbance and will contribute to an increased risk of collisions with birds and wildlife. Increased dust deposition may affect terrestrial birds, wildlife, and vegetation through changes to habitats. Most year-round sampling locations for the project showed dustfall reduced in 2017 from that observed in 2016 which may be due to dust suppression activities, particularly along the Tote Road. Metal concentrations across all 2012 to 2017 vegetation and soil base metals monitoring sites below Project thresholds. <i>Potential changes to the factors related to significance include</i></p>	Anticipated effects managed through monitoring, mitigation, and management practices: • Roads Management Plan and Environmental Protection Plan • Terrestrial Environment Mitigation and Monitoring Plan

⁹ Baffinland Iron Mines Corporation, June 20, 2018. *Mary River Modification Application – Production Increase, Fuel Storage, and Milne Port Accommodations (Revised)*, NIRB Application for Project Modification #318295.

Valued Ecosystemic Component	Potential Change in Effects from Mary River FEIS	Description of Change	Applicable Mitigation and Monitoring
		<i>increases in the magnitude, probability, and frequency of effects. However, with existing mitigation, the environmental effects evaluated to remain not significant.</i>	
Freshwater Environment <ul style="list-style-type: none"> • Freshwater quantity • Water and sediment quality • Freshwater Aquatic Biota and Habitat 	Change; not significant	Effects on surface water quality and/or sediment quality, freshwater aquatic biota, and freshwater aquatic habitat may occur from additional runoff with increased dust suppression activities on the roadway; and additional dust deposition from road traffic. Monitoring results indicate that dust can be managed successfully along the Tote Road, as dustfall monitoring has shown a decrease in 2017. <i>Potential changes to the factors related to significance include increases in magnitude and frequency of effects. However, with existing mitigation, the environmental effects evaluated to remain not significant.</i>	Anticipated effects managed through monitoring, mitigation, and management practices: <ul style="list-style-type: none"> • Surface Water and Aquatic Ecosystems Management Plan
Marine Environment <ul style="list-style-type: none"> • Sea Ice • Marine Water and Sediment Quality • Marine Habitat and Biota • Marine Mammals 	Change; not significant	No changes to interactions with sea ice as no change proposed to shipping season. Effects on marine environment may occur from additional surface water runoff and ore dust dispersion from stockpile, and routine discharges from additional ship traffic. Most additional ore dustfall expected to occur December-July during the ice season, eventually deposited in the marine environment during ice-melting/spring run-off period. A large portion of the land-based dust will accumulate in the Phillips Creek water-shed, be transported into Milne Inlet with the spring freshet, and then be dispersed by tidal flux, thus decreasing the likelihood of particulate concentrations resulting in substantial biological changes within the marine ecosystem. Residual effects on water and sediment quality at Milne Inlet considered minimal; conclusion supported by the existing water and sediment monitoring showing no biologically impactful changes have been observed. Additional ship traffic could interact with marine mammals through acoustic disturbances and vessel strikes; however, research suggests that temporary and localized behavioural changes are to be expected in response to ship encounters. Given the relatively low likelihood and short duration of encounters between marine mammals and vessel traffic, acoustic disturbances are not expected to affect marine mammals at the population level. The potential for vessel strikes	Anticipated effects managed through monitoring, mitigation, and management practices: <ul style="list-style-type: none"> • Surface Water and Aquatic Ecosystems Management Plan • Marine Environmental Effects Monitoring Plan • Shipping and Marine Wildlife Management Plan • Aquatic Invasive Species Monitoring of Milne Inlet Marine Ecosystem

Valued Ecosystemic Component	Potential Change in Effects from Mary River FEIS	Description of Change	Applicable Mitigation and Monitoring
		could increase, due to existing mitigation and the low likelihood of encounters, increased vessel traffic may result inconsequential increase in vessel strike potential. This conclusion is supported by the existing marine mammal monitoring under current operations. Specifically, narwhal abundance and distribution near Milne Port has not significantly changed and no known vessel strikes have been reported. No species considered invasive to the Arctic have been observed. <i>Potential changes to the factors related to significance include changes in the magnitude, probability, and frequency of effects. However, with application of existing mitigation, environmental effects anticipated to remain not significant.</i>	

2.3 Potential Changes to Socio-Economic Effects

Baffinland identified no negative socio-economic effects associated with the Production Increase Proposal and noted that the following predicted positive socio-economic effects:

- Avoiding the potential negative socio-economic effects on employment and contract opportunities associated with having to suspend mining, ore hauling and ore shipment that will occur once the 4.2 Mt/a limit is reached (predicted to be October);
- Avoiding the potential negative socio-economic effects that would occur when contracts with ore shippers and customers would have to be suspended once the 4.2 Mt/a limit is reached; and
- Positive benefits in terms of revenue generated and profile associated with Baffinland being able to reliably supply an increased amount of ore to existing and/or new customers.

Table 5 below is a summary of impact predictions, significance determinations, and reliance on existing monitoring or mitigation plans for the Mary River Project, that was presented by Baffinland as its application for the Production Increase Proposal.

Table 5: Summary of Socio-economic Changes in Project Interactions and Factors Relating to Significance¹⁰

Valued Ecosystemic Component	Potential Change in Effects from Mary River FEIS	Description of Change	Applicable Mitigation and Monitoring
Human Environment • Employment and Economy • Community Services and Infrastructure • Community Health and Well-being • Culture, Resources, and Land Use	Change; positive Change; not significant	Proposed activities around the Mine Site, the Tote Road, and Milne Port could result in potential for interactions or conflicts with land and resource users in these areas. Potential for increased Inuit harvesting through improved ease of access to the RSA and/or enhanced knowledge of the region by hunters (i.e., due to increased human presence). However, most harvestable species are abundant throughout the region, so increased hunting knowledge and access is not expected to result in increased hunting pressure. Total allowable harvest limits will reduce potential for population-level effects on harvested species; therefore, changes to how Baffinland manages visitors and hunters not necessary. Increased ship traffic not expected to result in adverse effects to marine mammals and therefore is unlikely to affect harvesting opportunities. In isolated instances, Project shipping may interrupt an individual hunt, or other marine boating activities to some degree. These instances are potentially eligible for compensation through the Wildlife Compensation Fund (WCF) established under the IIBA and administered by the QIA. Changes to archaeology are not evaluated, as all modifications are located in areas previously surveyed and mitigated. <i>Potential changes to factors related to significance include increases in the magnitude, probability, and frequency of positive effects.</i>	The anticipated socio-economic effects will be managed through existing monitoring, mitigation, and management practices.

2.4 Baffinland's Response to The Comments and Concerns of Other Parties

Following receipt of parties' final written submissions, on August 9, 2018 Baffinland provided a final response to parties' concerns, which can be summarized as follows:

¹⁰ Baffinland Iron Mines Corporation, June 20, 2018. *Mary River Modification Application – Production Increase, Fuel Storage, and Milne Port Accommodations (Revised)*, NIRB Application for Project Modification #318295.

- Noted that assessment provided in FEIS Addendum was based on current environmental monitoring related to the project, and that with the integrated adaptive management mechanisms, impacts from the production increase should be not significant. In addition to the current monitoring, Baffinland is expecting to add:
 - 6 additional dust fall stations
 - Decrease vessel speed along the Northern Shipping Route including Milne Inlet and Eclipse Sound
 - Install an Automated Information System at the Mittimatalik HTO office in Pond Inlet to communicate vessel traffic management
 - Conduct second year freshet monitoring along the Tote Road
 - Increase dust suppression measures along the tote road and install shrouding around the crushers, and
 - Implement communications protocol with the community of Pond Inlet.
- Considers that other terms and conditions in the NIRB Project Certificate (specifically listed) adequately address the concerns and recommendations put forward by reviewers of this application.
- Noted ongoing engagement with Pond Inlet, the various working groups, and community organizations.
- Responses to individual comments raised by parties was provided in detail, including:
 - Additional discussion on baseline data was provided on ambient air quality, settling pond structure and function, and locations of vessel drift areas. Comments then summarized data, and clarified triggers for various methods of monitoring (i.e. height of land surveys done when caribou observed closer to site) already in the current plans to manage these impacts.
 - Regarding concerns of wildlife impacts Baffinland noted that current monitoring is not demonstrating exceedances to thresholds that would require adaptive management strategies be triggered, and it is expected that these thresholds and triggers would function as required to trigger additional mitigation should increase impacts require additional mitigation.
 - Relates concerns of impacts back to the monitoring framework currently in place as all of the activities proposed in application are already occurring at site just at a lower level, and where increases to these impacts from the production increase proposal the plans are already designed to inform on actual impacts, identify where exceedances to thresholds may be met and inform parties, and already provide guidance on the changes required to implement adaptive management strategies.
 - Limitations to carrying of Heavy Oil are being handled under other processes which are undergoing further study due to the implications to northern communities; Baffinland expects to remain compliant to applicable codes and regulations.

3. SUMMARY OF INTERVENOR SUBMISSIONS

In response to the Board’s invitation to provide written technical comments in respect of the Production Increase Proposal, the Board received submissions from the following parties:

- Qikiqtani Inuit Association (QIA) – Public Registry ID: 319086 through 319091
- Government of Nunavut (GN) – Public Registry ID: 319082
- Crown – Indigenous Relations and Northern Affairs Canada (CIRNAC) – Public Registry ID: 319078, 319405, 319406
- Environment and Climate Change Canada (ECCC) – Public Registry ID: 319081
- Fisheries and Oceans Canada (DFO) – Public Registry ID: 319079, 319080, 319257
- Parks Canada (PC) – Public Registry ID: 319085
- Transport Canada (TC) – Public Registry ID: 319092
- World Wildlife Fund (WWF) – Public Registry ID: 319093, 319094
- Malachi Arreak – Public Registry ID: 319083

Table 6 below provides a very brief summary of the comments received; the full comment submissions can be accessed online through the NIRB’s public registry at www.nirb.ca/project/123910 using the specific public registry ID numbers noted above.

Table 6: Summary of Comments Received from Parties in Final Written Submission

Party	Comments in Summary Form
QIA	<ul style="list-style-type: none"> ▪ General: <ul style="list-style-type: none"> ○ Outlined commitments for the “<i>Project Stabilization</i>” approach which are intended to address community concerns and are already being acted upon ○ QIA opinion: adjustments to the project are necessary to ensure it operates in a mutually beneficial manner ○ Generally supportive of the Production Increase if commitments for Project Stabilization approach are properly implemented and performance audits are satisfactory ○ Does not consider an in-person hearing would resolve outstanding operational issues beyond what is already being addressed through the Project Stabilization commitments ○ QIA requests NIRB focus monitoring efforts on ensuring commitments are met and information gaps are addressed, especially socio-economic issues ▪ Impacts of Production Increase: <ul style="list-style-type: none"> ○ Concerns about increasing project effects while uncertainty remains from knowledge gaps not addressed by this application ○ Concerns not addressed by application regarding terrestrial impacts include truck traffic, effects on traditional land use, and increased dustfall from Tote Road and ore handling, especially as thresholds in the FEIS Addendum for the ERP are being exceeded which is not successful management of the issue as the Proponent concluded in the assessment for the Production Increase proposal

Party	Comments in Summary Form
	<ul style="list-style-type: none"> ○ Noted issues with increased effects to freshwater and marine environments as well as terrestrial wildlife and their habitat due to dust from additional activity, ○ Suggest the NIRB's terms and conditions directing management of ballast water and hull fouling be revised ○ No concerns regarding socio-economic effects
GN	<ul style="list-style-type: none"> ▪ Lack of detail in application on possible negative socioeconomic impacts related possible increase additional workload from the increased production rate; Baffinland provided clarification which resolves the GN's concerns. ▪ Addendum statements on caribou impacts incorrect, Baffinland corrected the statements and clarified that the current wildlife mitigation plan and monitoring framework would still apply to the Production Increase which resolves the issue to the GN's satisfaction. ▪ Application does not give assurance that additional dustfall from activities will be fully mitigated; Baffinland noted the current framework of plans and additional 2016 <i>Dust Mitigation Action Plan</i> would continue to apply in addition to the requirement to implement adaptive management strategies. GN made specific recommendation on ongoing dust and heavy metals in vegetation monitoring, which has been agreed upon by Baffinland.
CIRNAC	<ul style="list-style-type: none"> ▪ Lack of detail in impact predictions to support conclusion that no upgrades would be required to Tote Road to handle the additional traffic and risk of accidents ▪ No additional assessment provided on issue of Acid Rock Drainage/metal Leaching from waste rock pile despite low pH observed on site in collection water at this facility ▪ Detailed assessment on impacts to valued ecosystemic components not completed, and lack of clarity on what current mitigation measures would be used to manage possible changes in impact levels.
ECCC	<ul style="list-style-type: none"> ▪ Application does not contain enough information to support conclusion that there would be no significant change to the Project effects on air quality related to the increased 6 Mt/a; quantified projections on Greenhouse gasses, nitrogen dioxide and sulfur dioxide emissions should be provided for additional ship and truck traffic, as well as power generation. Detailed mitigation should also be provided where possible exceedances to standards may occur. ▪ The projected increase of one-way trips on the Tote road from 182 to 276 is a significant increase, however the application did not contain an assessment of impacts for this activity as Baffinland noted it was not a new activity. ECCC recommends Baffinland provide: current monitoring data on just deposition, a quantified analysis of increase to dust levels and water quality impacts and demonstrate the effectiveness of the current dust mitigation measures. ▪ Application notes increased production would involve an increase to the ore stockpile at Milne Port, and ECCC expects that such an increase to stockpile size would increase the surface area and therefore amount of runoff that must

Party	Comments in Summary Form
	<p>be management. The addendum does not confirm if the existing pond has the capacity to handle the required runoff for a larger stockpile.</p>
DFO	<ul style="list-style-type: none"> ▪ Addendum lacks detail and is unclear on what studies were used to inform assessment of impacts to marine mammals, and on which the conclusion that impacts would remain not significant was based. ▪ Negative impact to marine mammals identified in the addendum due to increased shipping, however detail insufficient to provide assurance that proposed mitigation, would adequately address the increased impacts, especially as the marine observer program has not been implemented. DFO recommends Baffinland conduct a thorough assessment of current mitigation plans, undertake robust modeling of anticipated noise exposure to marine mammals, and provide rationale on the effectiveness of mitigation and monitoring. ▪ Improvements to camp noted to impact three streams; although the streams are described in the addendum as non-fish bearing and intermittent, DFO has not been able to verify if the streams are indeed non-fish bearing due to a lack of baseline data presented. DFO requests that baseline be submitted, and if the streams are found to be fish bearing, Baffinland would have to submit a 'Request for Review' prior to beginning stream diversion construction.
PC	<ul style="list-style-type: none"> ▪ Due to activities being in proximity to several key parks, the proposal has the risk of impacting visitors experience, seabirds and their habitat, benthic organisms, and marine mammals. ▪ Recommend Baffinland clarify its precise commitment to open water shipping and undertake modelling on how vessel activity impacts marine ice formation. ▪ Request clarity on how increased vessel traffic will be managed around Eclipse Sound and Milne Inlet, as well as expectations for waiting vessels. ▪ Request Baffinland commit to single vessel transits only of Milne Inlet, and shipping operations demonstrate compliance with vessel speed restrictions. ▪ Recommend a shipping corridor be defined in consultation with communities and regulators.
TC	<ul style="list-style-type: none"> ▪ Any changes to operations of the oil handling facility require an update to the Oil Pollution Emergency Plan and a review by Transport Canada; Baffinland must submit an updated plan to reflect the additional 15ML of diesel. ▪ No concerns related to the proposed modifications to fuel volumes and marine shipping as Baffinland has indicated that they will comply with the applicable regulations.
WWF	<ul style="list-style-type: none"> ▪ No alternative assessment provided in the addendum, therefore parties unable to adequately assess justification and rationale for the amendment. The implicate suggestion that a shutdown to site would negatively impact employees appears to be a way for Baffinland to levy the board's decision ▪ Rationale for production increase ▪ Prohibit use of heavy fuel oil for project-related shipping ▪ Considers that the Marine Environment Working Group has not been effective in ensuring mitigation and monitoring occurring as promised; WWF

Party	Comments in Summary Form
	<p>recommends the NIRB revisits the intentions for the group and take on greater responsibility for structure and function of the working group.</p> <ul style="list-style-type: none"> ▪ Marine mammal monitoring has not been implemented for the project to the commitments previously made, the Addendum provides no further assessment of impacts or mitigation measures for additional impacts of the increased development. Suggest Baffinland be required to provide a quantitative assessment. ▪ Suggest additional terms and conditions: <ul style="list-style-type: none"> ○ to prohibit ships from carrying heavy fuel oil, requiring Baffinland to develop indicators and thresholds for all marine VECs prior to undertaking work related to the amendment, ○ a marine mammal assessment be provided outlining abundance and distribution of populations to inform monitoring, and ○ height of land surveys be conducted for caribou under the terrestrial monitoring program.
Malachi Arreak	<ul style="list-style-type: none"> ▪ Increasingly difficult for locals to maintain a traditional diet due to impacts from marine shipping, and narwhal pods have moved away from Eclipse Sound to Jones Sound and further west. ▪ Considers the wildlife compensation fund should be given to the impacted harvesters of Pond Inlet who are being most affected by the Project. ▪ Does not feel that the QIA and Baffinland have been successful in managing impacts of the project. ▪ Noted the extensive strain to Pond Inlet residents from project impacts.

4. CONSULTATION OPPORTUNITIES

4.1 Public Consultation

As set out in s. 112(4) of the *NuPPAA*, the Board has the discretion to develop the appropriate process and procedure when conducting a reconsideration of Project Certificate terms and conditions. With respect to the Production Increase Proposal, the Board recognized that the scale and scope of the modifications requested primarily required the Board to assess an increase in intensity of operations and activities that had previously been assessed and approved to proceed by the Board. On this basis, while still considering the modifications to be significant and warranting further assessment by the NIRB, the Board recognized that it was appropriate for this reconsideration to be a focused and expedited process. Although, as outlined in the Board's August 21, 2018 correspondence the Board determined that a Public Hearing was not necessary to support the Board's decision-making for the Production Increase Proposal, the Board's process for conducting the reconsideration included soliciting and receiving written comments from interested members of the public, and also hosting a Community Information Session on July 12, 2018 in Pond Inlet.

Table 7 below provides a very brief summary of the key issues raised by participants in attendance at the Community Information Session – a more detailed set of meeting notes has been included as Appendix B.

Table 7: Summary of Key Issues Raised During the Community Information Session

Subject	Issues/Concerns/Comments
ECOSYSTEMIC EFFECTS	
Dust Emissions/Deposition	Concerns were expressed about increases to dust emissions along the Tote Road associated with the increased traffic (recognizing that there is already concern about existing dust emissions along the Tote Road and concern that current dust suppression activities have not been very effective)
Marine Environment, Water, Ice and Sediment	Community members stated they have observed increases to the rate of ice melting and decreases in the thickness of ice in areas where dust has been deposited on the ice
Marine Wildlife and Marine Habitat	Local harvesters have observed declines in the numbers of seals and other marine mammals in the traditional harvesting areas surrounding Pond Inlet
Shipping	Concerns expressed that there are effects being seen on the marine environment, abundance and distribution of marine mammals and effects on the ability of local harvesters to harvest marine wildlife at times when there is an aggregation of ships anchored nearby, awaiting entrance to Milne Inlet
Shipping	Concerns expressed about the scale of effects on the marine environment associated with the existing levels of open water shipping and question the effectiveness of existing measures in reducing these effects
SOCIO-ECONOMIC EFFECTS	
Livelihood & Employment	Community members indicated that although Pond Inlet's residents have been the most adversely affected by the Mary River Project to date (such as effects on marine mammal harvesting due to declines in the abundance and populations of sea mammals), many of the promised employment and economic benefits do not appear to be flowing to Pond Inlet
Inuit Harvesting	With the declines in availability of marine mammals in the areas surrounding Pond Inlet, coupled with the restrictions on harvesters being able to use firearms near project ships, harvesters are not able to rely on the harvest of sea mammals as they did before and this is adversely affecting their families

5. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS OF THE BOARD

5.1 Ecosystemic Effects

5.1.1 Views of the Board

Although the FEIS Addendum submitted by Baffinland largely conformed to the guidance previously issued by the NIRB, the information provided was at times lacking in detail and data gaps created some uncertainty with respect to the adequacy of the impact predictions for the Production Increase Proposal. As a result, the NIRB echoes the concerns of Intervenor that there are unanswered questions and outstanding concerns regarding impact predictions and mitigation measures that are yet to be fully addressed by the Proponent. Through the NIRB's ongoing monitoring of project related impacts for the approved Mary River Project, several significant gaps have not yet been addressed by Baffinland leading to uncertainty in understanding of how the project is currently affecting the environment.^{11,12}

Concerns raised by community members through the NIRB's monitoring process, as well as during the July 12, 2018 Community Information Session in Pond Inlet suggest that adverse effects from project operations may be occurring (see Appendix B Community Information Session of this report); however, given limited monitoring data having been produced on various environmental components through Baffinland's project monitoring efforts to date, it is unclear whether the mitigation and adaptive management strategies for the project are effective. The final written submissions for this proposal which noted this issue included¹³:

- QIA:
 - Gaps in assessment of impacts to freshwater and marine environment leading to uncertainty of impacts from fugitive dust, species introductions, and disturbances to marine mammals; and
 - Climate Change Plan not yet available to address possible climate change issues from greenhouse gas emissions being generated from the project currently.
- GN:
 - Baffinland's application stated mitigation measures resulted in a decrease of dust fall in 2017 compared to 2016 but does not outline if 2016 and 2017 dust deposition have already caused significant effects; although commitments are made to

¹¹ Nunavut Impact Review Board, November 27, 2017. *2016-2017 Annual Monitoring Report for Baffinland Iron Mines Corp.'s Mary River Project*, sections 2.3.1, 2.3.2, 2.3.8, ...; Public Registry ID 314379

¹² 2016-2017 NIRB Annual Monitoring Report for the Mary River Project noted: Section 2.3.1 discontinued sea level monitoring, 2.3.2 no study conducted in 2016 to validate climate change predictions, 2.3.4 equipment failure leading to no data collection on air quality monitoring which also caused issues for 2.3.6 lack of data for noise and vibration monitoring, and 2.3.7 marine mammal surveys not completed as committed to due to cost and safety considerations and yet without alternatives.

¹³ Refer to NIRB public registry numbers in Section 3 of this report

mitigating the dust fall effects, the success of the proposed measures in bringing dust fall deposition level to the predicted threshold has not yet been demonstrated.

- The current study design for caribou monitoring in the Terrestrial Monitoring plan will not be able to detect project effects.
- CIRNAC: models for Acid Rock Drainage and Metals Leaching presented in original FEIS have been proven inadequate as a result of monitoring data; updated modelling required.
- DFO: unclear as to what additional data or references were used to support the conclusion of no change in narwhal abundance and distribution during the 2014-2017 period as the marine mammal observer program has been discontinued, especially as the additional traffic could have whales experiencing noise from multiple ships at the same time.
- PC: Given the concerns with procedures for managing the current shipping maximum, there is uncertainty that greater shipping traffic can be properly managed to mitigate impacts to valued components. These concerns about shipping related activity are linked to potential significant impacts to the marine environment, as well as visitor and public use, public safety and navigation.

In the absence of holistic monitoring results related to the effects of shipping and trucking for the approved Project, the Board is concerned that the aspect of the Production Increase Proposal involving increases to the intensity of hauling ore along the Tote Road and shipping via Milne Inlet could result in adverse ecosystemic effects beyond what was previously considered by the NIRB during the Board's Review of the original Mary River Project and the associated Early Revenue Phase Proposal. In particular, the Board has concerns that the effects related to the proposed increase to levels of road traffic and marine vessel traffic in support of increased ore transport are not well understood at present.

Some of the other areas of concern identified by the Board during the reconsideration process include the following:

1. The FEIS Addendum does not provide any clear evidence of how public consultation and Inuit Qaujimaningit/Qaujimajatuqangit, local knowledge and community knowledge have influenced the planning and design of the proposed activities and associated management plan updates.
2. At the public and community level, significant concerns were expressed regarding the potential effect of the both the existing Mary River Project and the potential for increased effects associated with the Production Increase Proposal on the marine and terrestrial environments.
3. There is a perceived lack of benefits from the existing Mary River Project accruing to residents of Pond Inlet, which is the community experiencing the most direct adverse ecosystemic and socio-economic effects of the existing Project.
4. The FEIS Addendum and other information provided in support of the Production Increase Proposal does not address in a direct manner how Baffinland proposes to better mitigate/manage the ecosystemic and socio-economic effects that have been identified by the community of Pond Inlet and associated with the Mary River Project to date, particularly in relation to the impacts of increased shipping, potential disturbance to marine mammals, birds and fish populations.

5. To date, Intervenor and community members have indicated that the Proponent has not produced credible, clear or effective plans to address the shipping-related effects of the Mary River Project.
6. To date, the existing marine mammal monitoring undertaken as part of Baffinland's ongoing monitoring for the Mary River Project has not generated sufficient empirical results to address concerns and gaps in the assessment of shipping impacts, and there is concern that a lack of information is making it difficult to compare effects predictions with an understanding of actual effects.
7. Based on information supplied in the FEIS Addendum, the Board is not confident that the effects on marine wildlife associated with shipping activities in Milne Inlet, Eclipse Sound and around the vicinity of Pond Inlet could be appropriately mitigated and managed and would be insignificant as predicted by Baffinland. The Board notes that the Proponent has still not developed a clear threshold for determining if negative impacts as a result of vessel noise are occurring in the marine areas adjacent to the project site pursuant to the existing requirements of Term and Condition 111 of Project Certificate No. 005. In the absence of such indicators and thresholds as required under Condition 111, the Board has concerns that the potential for effects on marine wildlife as a result of increased vessel noise may not be well mitigated and management measures may not be triggered in sufficient time to prevent the occurrence of adverse effects.
8. Similarly, the Board notes that Project Certificate No. 005, Conditions 99, 110, 111, and 112 all require the development of indicators and/or thresholds to guide the mitigation, monitoring, and adaptive management that is to be applied throughout the approved Mary River Project, particularly in response to shipping activities. The Proponent has yet to fully meet these conditions and satisfy these monitoring requirements. In the absence of these indicators and thresholds, the Board is not confident that the potential for additional effects related to the additional shipping under the proposed Production Increase Proposal can be adequately monitored, mitigated or managed.
9. The FEIS Addendum has not made clear how dust generated from the proposed increase in vehicular traffic along the Tote Road would affect the quality of adjacent freshwater/marine area/sea ice or the terrestrial environment, how dispersal towards communities would be prevented, and if there is any mitigation strategy that could be employed to address these effects.

5.1.2 Conclusions and Recommendations of the Board

Baffinland's FEIS Addendum indicates that the potential impacts occurring to the Marine and Terrestrial Environment, including caribou associated with the Production Increase Proposal, will be non-significant after existing mitigation measures are employed; however, as outlined in the Board's views in Section 5.1 the NIRB is concerned that such conclusions of non-significance have not been supported with empirical data in respect of the increased intensity of road haulage and shipping in the marine environment associated with this proposal. Specifically, based on Intervenor's comments, the information provided by community members and considering the monitoring, mitigation and management information supplied to the NIRB in fulfillment of the Board's Mary River Project monitoring functions, the Board does not agree with the Proponent's conclusion that the proposed increase in the number of ships transporting ore and carrying fuel

supply shipments during the open water season would not result in any significant environmental impacts. The Board also has concerns that the effects predictions with respect to the conclusions of non-significance of dust emissions associated with the increased road transport of ore do not address questions about the efficacy of existing dust control mitigation measures.

Having considered all aspects of the Production Increase Proposal, the Board has concluded that the potential effects associated with proposed installation of new camp accommodations at Milne Inlet and a new 15 ML fuel tank at Milne Port can be adequately managed through existing requirements for the approved Project; the Board is recommending that these activities be approved to proceed to licensing. The NIRB noted inconsistency in plans communicated by Baffinland for the proposed decommissioning of existing camp facilities deemed unsuitable for continued use by project personnel, particularly with the anticipated timing of decommissioning and maximum occupancy while in use. The Board expects additional clarity regarding this issue can be obtained through the course of its ongoing monitoring program for the Project moving forward.

The Board concluded that the increased trucking and shipping aspects of the Production Increase Proposal should not be approved to proceed as these activities could result in adverse ecosystemic effects beyond what was previously considered by the NIRB during the Board's Review of the original Mary River Project (2012) and the subsequent Early Revenue Phase Proposal (2014); the Board lacks confidence in both the impact predictions prepared by Baffinland for these components of the Production Increase Proposal and the effectiveness of how mitigation and adaptive management strategies for the approved Project are currently being employed to manage trucking and shipping related effects.

5.2 Socio-Economic Effects

5.2.1 Views of the Board

The Board acknowledges Baffinland's conclusion that an interruption to employment and other benefits and interruptions in associated business relationships may have detrimental socio-economic effects on the overall Mary River Project if the Production Increase Proposal is not approved by the Board to proceed to the permitting stage. However, the Board also notes that during its previous assessment of the Early Revenue Phase Baffinland asked for, and was granted, operational flexibility in terms of the amount of ore hauled on the Tote Road and shipped via Milne Inlet, as the assessment of the Early Revenue Phase was based on original projections of 3.5 Mt/a being economically and technically feasible. The 4.2 Mt/a limit imposed by the Board under Term and Condition #179 (a) and (b) reflected a 20% operational flexibility which, during the Board's public hearing for the Early Revenue Phase Proposal in 2014, Baffinland indicated was necessary for the successful implementation of that Project.

Within its March 17, 2014 Public Hearing Report and recommendations associated with the Early Revenue Phase Proposal,¹⁴ the NIRB communicated its serious reservations regarding the potential for increased effects on marine mammals and the life of the mine that could be associated with Baffinland extracting, shipping and transporting this additional 20% when the increased volume was added to the volumes already authorized by the Board to be mined, transported and shipped under the original Mary River Project Proposal when the railway and all season shipping from Steensby Port would commence. The information provided by Baffinland in support of the Production Increase Proposal does not assuage the Board's concerns in this regard.

The rationale for why Baffinland's production rates as proposed under the Early Revenue Phase should now be increased to 6 Mt/a was not fully supported in the FEIS Addendum, especially in light of the concerns of the interested parties and the Board in respect of the potential for adverse ecosystemic effects associated with the increased road haulage and marine shipping. The FEIS Addendum does not address how the economic viability of the Mary River Project (as modified by the Early Revenue Proposal) is limited by the current hauling and shipping limits. As the Board has considered subsequent amendment proposals for the Mary River Project, it remains the responsibility of the Proponent to establish the economic viability of each proposal, especially where updates to the economic feasibility of project components or the overall project may have changed. However due to the information gaps resulting from limited available monitoring data from Baffinland on several valued ecosystemic components of specific concern to communities closest to the project, the Board is not satisfied that the increased impacts associated with increased hauling and shipping can be fully managed by current mitigation and monitoring plans for the site.

The Board heard that Inuit harvesters in the areas surrounding Pond Inlet have directly observed declines in the populations and distribution of marine mammals along the approved Mary River Project's shipping routes. Community members also noted that limits on their ability to discharge firearms in proximity to ore ships waiting to enter Milne Inlet or Eclipse Sound is also adversely impacting their ability to harvest in traditional areas. These effects appear to already be adversely impacting the harvest of marine mammals in the area, and this, in turn, appears to be affecting local harvesters in terms of the quantity and quality of marine wildlife that can be harvested. The Board has concluded that the potential for these types of adverse effects to increase with the additional marine shipping associated with the Production Increase Proposal has not been adequately addressed through the FEIS Addendum.

5.2.2 Conclusions and Recommendations of the Board

The Board recognizes the desire of Baffinland to avoid detrimental socio-economic effects associated with a suspension of ore hauling and shipping when the existing 4.2 Mt/a limit is reached. However, in the face of potential significant ecosystemic effects associated with marine shipping and road haulage, the Board has concerns that there is significant potential for adverse

¹⁴ NIRB File No.: 08MN053, Public Hearing Report for the Mary River Project: Early Revenue Phase Proposal, Baffinland Iron Mines Corporation, March 17, 2014.

socio-economic effects associated with declines in the harvest of marine mammals for the residents of Pond Inlet. that have not been adequately addressed by Baffinland in the FEIS Addendum. As the Board has concluded that the information in the FEIS Addendum has not established that the existing hauling and shipping limits are affecting the economic viability of the Mary River Project (as amended) the Board has determined that the Proponent has not met the onus of establishing the socio-economic need for the proposed increase to hauling and shipping as presented in the Production Increase Proposal. Further, the Board has concerns that the adverse socio-economic effects associated with declining sea mammal harvesting are likely to be exacerbated with increased shipping, and these effects have not been adequately addressed through the FEIS Addendum. On this basis, the Board recommends that due to the potential for significant adverse socio-economic effects associated with the increase to marine shipping, the aspect of the Production Increase Proposal involving increases to the amount of ore trucked and shipped out of Milne Inlet not be approved to proceed at this time.

6. RECOMMENDATION TO THE MINISTER

As detailed in this Reconsideration Report and Recommendations, having concluded the Board's reconsideration of the terms and conditions of existing Project Certificate No. 005 for the Mary River Iron Mine Project under Article 12, Section 12.8.2 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada* and s. 112 *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (NuPPAA), the NIRB recommends that:

1. Baffinland Iron Mines Corporation's addition of a 15 ML diesel fuel tank to the existing Fuel Storage Facility at Milne Port and the installation of a new 380-person accommodations camp at Milne Port as presented in Baffinland's "Production Increase Proposal" NIRB File No. 08MN053 be permitted to proceed to the permitting stage without further assessment by the NIRB; and
2. Baffinland Iron Mines Corporation's proposed increase in the amount of ore produced and shipped annually via Milne Inlet from the current limit of 4.2 Mt/a to 6 Mt/a and proposed amendments to Term and Condition # 179(a) and (b) of Project Certificate No. 005 under the "Production Increase Proposal" NIRB File No. 08MN053 *not* be permitted to proceed to the permitting stage, on the basis that this aspect of the Proposal poses the potential for significant adverse ecosystemic and socio-economic effects that cannot be adequately mitigated.

The Board highlights that the NIRB's recommendations in respect of the Production Increase Proposal in no way predetermines or otherwise limits the outcome of the Board's future assessment and decision-making associated with the Phase 2 Development Project Proposal, which will be considered subsequently.

7. RECOMMENDATIONS REGARDING CHANGES TO EXISTING PROJECT MONITORING OR PROJECT CERTIFICATE TERMS AND CONDITIONS

7.1 Changes to the NIRB's Monitoring Program

In order to allow for the specific activities approved under the Production Increase Proposal (i.e. additional fuel storage and camp modification) to fully meet the requirements of the Project Certificate terms and conditions, and to ensure that potential adverse impacts to the environment are adequately mitigated, the Board has determined that certain aspects of the ongoing monitoring program for Project Certificate No. 005 and reporting requirements for the Mary River Project may need to be updated, and/or require additional follow-up actions to address potential environmental issues. The following monitoring and reporting updates are required to be submitted by the Proponent to reflect the approved changes and activities associated with the proposal:

The Board specifically notes that at the time of the April and August 2018 NIRB site visits to the Mary River Project, it was observed that all of the protective mesh around the landfill area were still completely removed from the supporting poles similar to previous NIRB site visit observations in 2014, 2015, 2016 and 2017 and the newly erected wooden fence around the facility appear to be insufficient to contain wind-blown debris originating from the landfill. The NIRB finds that the condition of the facility has not significantly improved since the issue was raised in previous years 2014 through 2017. Baffinland has yet to install more durable fencing materials consistent with best practices and as recommended by the NIRB in its annual recommendations. Further, the NIRB's 2017 Board Recommendation #31 requested that Baffinland continue to evaluate its need for an upgraded litter fence around the active areas of the landfill in the light of changing environmental conditions at site. The Board directs Baffinland to adhere to industry best practices for landfill operations, including through the installation and continued maintenance of landfill litter fences to ensure waste materials are appropriately contained.

1. Waste Management Plan

The Proponent shall update its Waste Management Plan noting all the specific measures that will be undertaken to ensure adequate waste segregation for incineration operations, as well as methodologies for ensuring that all stationary combustion equipment will be subject to a routine maintenance schedule to ensure that emissions continue to be in line with relevant criteria.

2. Fuel Management Strategy

Prior to the installation of the 15ML tank, the Proponent shall submit updated versions of the following plans to the NIRB:

- Emergency Response Plan,
- Spill Contingency Plan, and
- Oil Pollution Emergency Plan (OPEP).

Updated plans should include information pertaining to the current fuel inventory, as well as a list of spill response supplies with details of the type, size and quantity of spill kits for emergency areas in bulk fuel storage reflecting the additional fuel capacity and upgrades to the facility. The Proponent should clarify which protective methods and best management practices will be employed for the construction and containment of additional fuel tanks and storage area to prevent

any damage to the terrestrial ecosystem, including the adjacent marine environment. The updated plan is also expected to include:

- Discussion of how the proponent intends to comply with the oil handling facilities standards (TP 12402E), with specific information regarding the following items:
 - Description of the level and category of the proposed oil handling facility according to the maximum oil transfer rate in cubic metres per hour (with respect to each single oil product loaded or unloaded to or from a ship);
- Information regarding the adequacy of the current emergency response procedures to address all potential accidents, spills, and or malfunctions associated with the proposed increase in Fuel Storage Facility capacity.

The Board encourages Baffinland to remain in regular communication with the NIRB through its Monitoring Officer, and with regulatory authorities responsible for Project oversight, to ensure compliance with the requirements of the NIRB Project Certificate No. 005 and the various licences, permits and approvals issued for the Project. The NIRB also reminds the Proponent that strict adherence to the terms and conditions of the amended Project Certificate No. 005 (#3, 6, 8, 9, 11, 17, 24, 25, 26, 29, 163, 169 and 173) continues to be required for the components of this modification proposal that have been allowed to proceed in addition to the Mary River Project in general.

In seeking approval to implement the Early Revenue Phase for the Project, Baffinland indicated its intention to deliver “a first development phase with reduced upfront capital requirements and shortened construction duration such that production and revenue generation are able to commence sooner with the objective of facilitating the second, larger, Rail phase (as described in the FEIS) of the Project at a later date”¹⁵. Within its March 17, 2014 public hearing report for the Early Revenue Phase, the NIRB expressed its confidence that this first development phase could proceed *if* it is undertaken within the limits and mitigation measures included in the comprehensive additional and revised terms and conditions of Project Certificate No. 005. Although Baffinland has sought to implement development of the approved Mary River Project in phased approach, the commitments made by the Proponent for environmental protection and compliance have not diminished in importance to ensure full compliance with Project Certificate No. 005 is achieved. While Baffinland is currently seeking approvals for implementation of a second phase of development for the Project, the “Phase 2 Proposal”, the NIRB reiterates that strict compliance to the terms and conditions of Project Certificate No. 005 continues to be required for the approved activities and Mary River Project while consideration of the Phase 2 Proposal is ongoing.

¹⁵ Baffinland Letter to NIRB Re Request to Amend Project Certificate No.005-Mary River Project (January 10, 2013)

APPENDIX A List of Acronyms

ACRONYM	ENGLISH	INUKTITUT
ᐅᖃᐅᓯᑦ	ᑭᐃᑭᖃᓯᐱᑦᐅᓯᐱᑦ	ᐱᓯᐱᖃᓯᐱᑦᐅᓯᐱᑦ
CEA	Cumulative Effects Assessment	ᐱᐅᐅᖃᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ ᑭᐃᑭᖃᓯᐱᑦᐅᓯᐱᑦ
CIRNAC	Crown Indigenous Relations and Northern Affairs Canada	ᓯᐱᐱᑦᐅᓯᐱᑦ ᑭᐃᑭᖃᓯᐱᑦᐅᓯᐱᑦ ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
<i>Previously</i>		ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
INAC	Indigenous and Northern Affairs Canada	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
COPC	Constituents of Potential Concern	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
DFO	Fisheries and Oceans Canada	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
ECCC	Environment and Climate Change Canada	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
EIS	Environmental Impact Statement	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
EMP	Environmental Management Plan	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
FEIS	Final Environmental Impact Statement	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
GN	Government of Nunavut	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ
HTO	Hunters' and Trappers' Organization	ᐱᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦᐅᓯᐱᑦ

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Appendix B Community Information Session

On July 12, 2018 the NIRB held a Community Information Session in Pond Inlet to hear feedback on Baffinland's proposed Production Increase Modification. The following table summarizes the oral feedback received during this session.

Issue	Comment
Dust	When we first started we thought big rock wouldn't be crushed or that there would be no dust problem. Then we saw the crushing and all the dust. We see the dust where ore is being loaded. I am in that area lots and I see red dust everywhere. We always see it from the river to the shore as there is lots of wind. The dust is going far. There is also lots of algae on the bottom of the ice and seals and narwhal and birds go under ice to feed on the krill. I think there will be impact to Bruce Head. Lots of impacts. Last winter I caught two red ptarmigans and you see lots of white things turn red from the dust.
	Can they make the road cement? The rough road breaks the b-trains, and then less dust and not so much dust into river. Iron ore makes things red.
	I want to see Baffinland profits used to clean up iron ore dust deposition. Will Baffinland clean up the dust when it reaches a certain depth? Need money for remediation. If they build the rail road will that reduce the dust problem?
	Working at a mine on and off since 2004 and I have seen all the changes and my concern is a fence around loader area to prevent dust from blowing all around. I see lots of dust and lots of things turn red.
Marine environment, Shipping	There is an area for ore ships while they wait their turn. Could be there for up to three days. Been 2 years now and west of Pond Inlet and in the inlets lots of hunters there and ships waiting in Milne Inlet. This is too much as ships are very noisy and when in tents and cabins it's noisy. This has to improve. They are to follow the rules but they are ignoring us. We weren't worried about the ships but now there are more ships with no regard to hunters. There are also freighter ships that travel at great speed and cause washes or big waves on coastline and bang boats against shore. Ore ships go slow, but seeing even more ships is going to impact us. With increased shipments there would be an even bigger impact. I want to say all this to the Board.
	Question to Baffinland: we originally wanted Steensby and port there and then you wanted a port at Milne inlet. Now that they want to increase shipping and we need to know what they really want to do. I know they wanted to increase revenue, are you trying to increase shipping/production? It would cost less to ship through Eclipse Sound. I support delaying it. The older people and our parents listen to them. I am older now and understand and remember things. They told us that we the youth would benefit. We were promised a swimming pool and I am an adult now and it's not here. If there is an increase to shipping then we will see more ships on a daily basis. It isn't confidential and now we don't enjoy the land anymore as there are ships and ships and ships. There are day trips for

	<p>hunting and with all these ships you can't shoot because it isn't safe. The proposal to increase shipping should be delayed. The ore will always be there.</p> <p>Lots of cruise ships coming and not all ore ships and everyone southern and northern need to work together so things run more smoothly.</p>
Wildlife	<p>I have a concern and I have been a hunter a long time and I am still a hunter even at my age, an active hunter. This winter and this spring I had a concern and it is about the animals. When the ice starts forming there are many seals. Milne inlet at freeze up but there are no seals? Where are they now? Where did the seals go and I do not feel Baffinland wants to answer. This year I went to Clyde River and no seals there either and we heard Clyde River catching seals they recognize from Pond Inlet. Hunting towards Lancaster Sound hardly any seals breathing holes either. I used to live there and there used to be big breathing holes and they used to be huge. I think too much noise from ore carriers. If I shoot a gun in Eclipse sound there wasn't a big echo but towards Button Point you could hear the sound echo from mountains. The echo through water larger than echo through air. Seals are my food source and so are the wildlife. I do not support the project.</p> <p>Lots of fish in the area and best fishing spot by pond Inlet and by Kugluktuk Bay area and you should be aware of the very narrow opening and the narwhal having calves in the area. There are very obvious impacts.</p> <p>With all the ships the water will be affected in the wrong way. Listen to what we have to say.</p> <p>Baffinland has had an impact on the environment. They have ruined a lot of land and fishing areas. someone went fishing in an area that used to have a lot of fish and he only caught two in the nets. This area we used to fish and now plentiful fish no more. The increase to production is going to impact our potable water, our drinking water. Baffinland has to remember this.</p> <p>Baffinland said they were going to Steensby and then switched to Milne. Open both then Steensby has less wildlife and Milne is a migration route for narwhal, seals, bowhead whales. More ships can go to Steensby and that would increase shipping.</p> <p>We would like to see compensation to hunters from shipping and mining. Wildlife has been impacted as well. We live off the land.</p> <p>Changes are happening to marine and wildlife. I am a hunter and hunting is being affected by this project. It feels like the elders are not being heard and that Baffinland only visits Pond Inlet to listen to concerns, not address them. Public meetings are one thing, approval is another.</p> <p>When I was a child and up to today I never thought I would be involved in meetings like this. I knew iron ore there when I went hunting. Now I don't think I will see caribou especially since caribou are not migrating or calving where they are mining. Caribou will go further and ever since I was a child I was around Mary River before anyone in room was born. There used to be caribou here and there are letters and this person's father would jot down observations. It is now the property of Baffinland and I am not happy. Doctors told me I would die soon and I never thought I would hear that. I</p>

	have been pondering upon my father-in-law for the traditional knowledge. You people do not understand it fully because you are not Inuit. The wildlife we feed on is the source of our life and our livelihood
Socio-economics	I am hard of hearing and its good there is an opportunity to speak and we love our community and wildlife. Mining will continue and there are royalties and in Pond Inlet we haven't seen one cent and QIA does not consider us and it's too bad. QIA treats us like nothing. I would like to go to Mt Herodie by truck and comfortably. I am hard of hearing and lots of thoughts said, listen to it carefully. Question to Baffinland about jobs, are there going to be more available or going to keep the same employees? Baffinland can create more jobs for Inuit.
	If Baffinland built a training centre in Pond Inlet Inuit don't have to travel so far to train. <i>(Baffinland responded to this stating that they are in the process of negotiating to build a training centre in Pond Inlet.)</i>
	There are impacts to north Baffin area and impacts to other communities and it hasn't benefited infrastructure to communities. Not seeing benefit to having a mine. Can't say yes now cause lots of impacts to things around in the environment. We need to see benefits and we have Nunavut agreement.
	I am not in favour of the project. Being an HTO member I would say that the project proposal should be on hold. There had so many modifications and changes in the project already happened and now they are proposing another phase of the project. I would like to see better benefits for the Inuit. This project has more impact on North Baffin and also multiple impacts on other communities. So far, there were no benefits for the infrastructure development. There were too many environmental impacts.
	I used to prepare Steensby Inlet, now the company...we always wanted the port at Steensby Inlet and then use the other port at Milne Inlet for shipment of supplies. Now it is becoming more muddled than ever. We need an agreement in place and see how development happens. Needs to be a negotiating team in place to work to get things back to Steensby.
	Many many southerners working, and many Inuit apply for jobs and never get a response.
	Baffinland needs to be assessed and we are prisoners and our food prices have gone up. Baffinland has not assisted and some people employed at the mine are janitorial (lower/starter positions) and Inuit always given helper or janitor positions. Ships helpers would come being paid \$20,00. We were expecting them to go through Steensby and if we aren't listened to we can go to the courts. Inuit are not given opportunities of higher employment and more Kabloona hired. Inuk woman was hauling but she was fired. We try to rely on QIA but they aren't here and we don't see benefits. We are increasing by population and we are the most impacted community as Pond Inlet. I have written stuff down and I will give you a copy later, I will put this in writing.
	If you are fired you go through subcontractor HR. Baffinland wouldn't help because I work a hood up because of the dust. Baffinland fired me from Nuna and I was a grease guy for b-trains. They say I was restricting my vision. I

	<p>was given no warning and it was really dusty, hard to know which HR to go to.</p>
	<p>I'm from Pond Inlet and do not go hunting and I hold a job and I heard concern about wildlife being impacted many times. We were told there would be jobs but something blocks us. People need jobs here and want to work but get blocked by certain things so they don't get employment. Young people say application was just put aside and I want to bring it up. We also hit barriers in the office here.</p>
	<p>I was born in Pond Inlet and have always lived here. I would like more info on the IIBA and it says it benefit to Inuit. How much impact would a person have to have to get benefit? Most Inuit don't know how to write in English and many don't know how to fill out form on the NIRB website. We don't know how to fill out forms if we wanted a benefit and if we don't get approval for benefit then what? There is a hotel with very few rooms and sometimes a lack of places for people to visit...people overflow. Perhaps if there were better instruction in place to help write proposals for pool/taxi service. Who do I go to run a business? No bank here and don't know how to fill out forms. We need better forms.</p>
	<p>I was never part of the negotiation team and Baffinland made lots of agreement but its my headache now. We come across barriers that we need to have addressed. Lots under IIBA not mitigated and look at the letter we sent yesterday. If Baffinland implemented thing then it would be easier; 80% of agreement implemented by QIA Inuit Benefits would be better if things were done. I would like my headaches to end with implemented things.</p>
	<p>I wasn't going to say anything but I will now bring up three things, talking about staff members ever since the beginning we were told good news and Pond Inlet would have lots hired. It's been several years and still less than 20 people working there. How about that plan of hiring from Pond Inlet? The number from Pond Inlet is always low on site and then when they are on site they are told they are no good. That is not a way to work and how can things be like this for the next 20 years with menial jobs. Wildlife are impacted with the increase of ships and trucks and what about employment in the future? Would Baffinland train supervisors and managers? This more appropriate. Yes they have heavy operator training however people are harassing employees and they don't want to work there. Inuit Orgs like QIA represent us in Baffin region. We know QIA gets benefits but we get nothing. Will QIA be working with us? Baffinland should be working with the Hamlet. But we would still be impacted as much. Wildlife greatly impacted and youth say wildlife will come back. That not traditional as we know that once they are gone they don't come back. When we go caribou hunting to Mary River and we are told we can't use the road, why can't we use the road if we are going to the Mary River area, what benefit to us? We need to access the area.</p>
	<p>I want you to listen to me very carefully I have a concern regarding what was said before. Inuit were told that ore was to go to Steensby Inlet. I want to raise a reminder and say it again that Baffinland said they would support</p>

	<p>hunters before they started and they don't seem to be doing it. We raised it as a concern between each other and like a family we support one another, borrow from friends and family. But hunters have to wait for assistance for fuel, boats, rations and other stuff and when it doesn't come it is very disappointing and I think there can be a way to support hunters. There is always a lack of money and more concern with mining rather than hunting. When everything is done will wildlife come back to levels that were there before? We have heard that the earth will no longer exist and that could be the same with our wildlife. If things change how can we survive, and we will need to work together hunter and mining. The elders of our communities were able to survive off the land.</p> <p>Welcome to our community. As a child I complained a lot. I was rejected and I feel like NIRB is rejecting me. I will tell you a story, so you know how I feel. I wanted to travel with my dad when I was smaller, and he would say no and that rejection was hard as I wanted to go with him. I feel that way with NIRB and I am one person or voice against a project. We talk to IPGs and QIA and other boards around. If companies want to make amendments and within a few years span Baffinland has been forceful and aggressive in the ways, they want to do things. I want to raise concerns. The company is mining in our region and I am thankful they are helping us with income and help with various organizations in our communities. During the Early Revenue Phase, a hunter had spoken out and the ERP as under 4.4 million tonnes per year. I myself have witnessed the ships anchored and it seemed like a lot of tonnage and now they want more. I would talk to my dad, but he would reject my thoughts. They want to increase shipments and there needs to be a total study done on everything and including whales going in and out of the inlet. I think before they increase production and there needs to proper studies done on marine mammals. We will send a list of what we want studies and I want all mammals (marine/terrestrial) as there are no concerns for hunters trying to support their families. There used to be bowhead and we know they go through this Inlet but where do they come from and where do they go? We have not seen studies of impacts to hunters of seal and need sometime soon.</p>
Other	<p>I expected Board Members to be present and I don't see them present. I don't like presenting to only staff members for this big project.</p> <p>I have brief comment would like the project to not proceed and government hasn't mentioned this. Miners that mine have a shorter life span and I know it's a secret they hold deeply.</p> <p>I have been at meetings for 3 days now regarding this proposal. I want to know if the NIRB could write a report or do research or get money to do research on what has been impacted. I don't mind but we see a lot of traffic on the tote road and if it increases would there be an increase to possible impacts? We had no research on terrestrial/marine wildlife and I want to see the project put on hold for now.</p>

	<p>Request that NIRB visits Pond Inlet more often to provide information sessions because these meetings are a good way to communicate with the residents. Want to see ships anchor at Button Point. Want compensation to hunters impacted by shipping and hunting. Would like to see better reports from Baffinland prior to doing activities.</p>
	<p>Good that you are holding this meeting. NIRB, Baffinland, QIA are you all here? I will give you a copy of my notes after I talk. Can we talk to staff members of Baffinland? Thank you for this opportunity, our words as Inuit and resistance to shipment of ore is increasing for those meetings we talk about wildlife with Baffinland. Some of us older folks live on wild meat. When we get support in the protection of wildlife and the people of Pond Inlet when we talk to Baffinland, QIA, NIRB we talk into the air and never given any support. I seem to understand we just talk to the other and what we say is not documented. The Boards talk to each other about supporting Inuit. I will talk to the HTO Board. A former conservations officer was protecting wildlife and to my understanding he now works for Baffinland he is not using his knowledge to support Inuit. When you work for them (Baffinland) you cannot talk against them, he would be fired. Traditional knowledge comes from people older than us and we hold onto the knowledge. In less than 20 years there are less seals than before. I am telling the truth. If ships were not there, then the seals would be there. I don't eat meat much now. It's comforting to us and our bodies to eat traditional food. Our bodies are better and stronger when eat traditional foods. My body is weak on all store-bought meat. Wildlife is our food. I noted earlier this spring as I was flying to Ottawa on a clear day that as I looked at the Tote Road I could see the snow melting from all the dust. Insects and small mammals like lemmings would be killed by the ore dust. You cannot drink the water and water has be re-routed. I want my words written down and made public. The earth will still be here, and snowmobile and boats are what we hunt with now and it can be dangerous at certain times of the year to go out.</p>
	<p>This is just the beginning of mining and people are saying they are being impacted but have concerns with Baffinland following the rules. QIA is working on things and if they can come up with something I would like to see the project go ahead.</p>
	<p>Now ever since Baffinland presented and Inuit approved because Steensby Inlet would be used, and Inuit wouldn't be affected. I didn't know this was going on and if I knew what I do today I wouldn't have approved the project. If they were following the rules, then we would sign off and not have this meeting. Today it was the total opposite of what they said. Pond Inlet is going to be the most impacted and Baffinland going to be looking for approval. They said they would do certain things and I agreed but it wasn't done. Pond Inlet is the most affected by the project and we are always here and will always be here. If they had followed and listened to requests, we wouldn't need this meeting. Don't just listen do something.</p>

	<p>Is Baffinland following all the terms and conditions? I would like to recommend that current proposal not be approved to proceed. I would like to see better reports done like FEIS and see work done. We can go on NIRB website to make comments but not a lot have internet at home or have computers we would like to see NIRB staff in community as this is better and more personal. I would like to see NIRB staff more frequently, so we can raise our concerns. We want to see boats anchor at Button Point.</p>
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Government
of Canada

Gouvernement
du Canada

Ms. Sharon Ehaloak
Executive Director
Nunavut Planning Commission
P.O. Box
IQALUIT NU X0E 0C0

September 14, 2018

Dear Ms. Ehaloak:

Thank you for your letter of August 23, 2018, regarding the next steps to revise the proposed Amendment No. 1 to the North Baffin Regional Land Use Plan. This amendment concerns the portion of the transportation corridor from the Mary River mine site south to Steensby Inlet located within the North Baffin planning region. You have asked for our advice on potential options for the Nunavut Planning Commission to complete this work. I appreciate the opportunity to offer our views.

Both of the options presented in your letter would begin by revising the wording of the proposed Amendment No. 1 modeled on the approved Amendment No. 3, the latter of which includes the transportation corridor from the Mary River mine site north to Milne Inlet. We agree this would be an appropriate model to use in considering revisions to Amendment No. 1 (with necessary changes, such as the removal of references to the marine component) and anticipate that revising the amendment in this manner could address many of the detailed comments the Government of Canada provided to the Commission in June 2014, following the rejection of proposed Amendment No. 1.

The main difference in the two options you propose appears to be whether or not the Commission should undertake a public review of revisions proposed to Amendment No. 1 prior to submission to the federal and territorial ministers and Nunavut Tunngavik Incorporated for approval. I understand this is based on subsection 62(2) of the *Nunavut Planning and Project Assessment Act (NuPPAA)*, which requires the Commission to consider whether any further public review is necessary when it revises a proposed amendment.

The Act stipulates that the requirement and form of, any public review is the Commission's decision to make. In making its decision it is important for the Commission to consider relevant factors to determine whether the Commission has obtained enough public feedback to make an informed decision on the revisions to the wording.

In view of the scope of the revisions the Commission is considering to the proposed Amendment No. 1, in addition to the scope of the original public review of the Mary River project jointly conducted by the Commission and the Nunavut Impact Review Board in 2012, which included the railway to Steensby Inlet, the Government of Canada's preference is that further public review is likely not necessary.

However, we also recognize that a number of potentially significant changes, as noted in your letter, have occurred in the intervening years, including legislative changes and decisions on other projects, and other parties may have other views and concerns. Thus, the Government of Canada would support proceeding with further public review if there is a request with strong rationale for it from planning partners.

Thank you again for providing the opportunity to share our views on the proposed path forward for this revised amendment.

Yours sincerely,



David Rochette
Regional Director General, Nunavut

c.c.: Hannah Uniuqsaraq, Acting Executive Director, Nunavut Tunngavik Inc
Pauloosie Suvega, Deputy Minister of Environment, Government of Nunavut



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Minister of Environment
Ministaat Avatiliqiyitkut
Ministre de l'Environnement

Sharon Ehaloak
Executive Director
Nunavut Planning Commission
P.O. Box 1797
Iqaluit, Nunavut
X0A 0H0

Thank you for your letter dated August 23, 2018 regarding process options for Amendment No. 1 to the North Baffin Regional Land Use Plan (NBRLUP). While the Government of Nunavut (GN) appreciates the proactive communication, we trust the judgement of the Nunavut Planning Commission (NPC) to make decisions respecting consultations for land use planning.

The GN will respect NPC's chosen process forward with regards to Amendment No. 1 to the NBRLUP and we intend to fully participate in that process.

Sincerely,

Pauloosie Suvega
Deputy Minister
Environment

cc. Steve Pinksen, Assistant Deputy Minister, Department of Environment, Government of Nunavut
Hannah Uniuqsaraq A/Chief Executive Director, Nunavut Tunngavik Incorporated
David Rochette, Regional Director General, Crown-Indigenous Relations and Northern Affairs Canada
Ryan Barry, Executive Director, Nunavut Impact Review Board

ሐረግ 20, 2018

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September 20, 2018

Sharon Ehaloak
Executive Director
Nunavut Planning Commission
P.O. Box 1797
IQALUIT NU X0A 0H0

Dear Ms. Ehaloak,

Re: Reconsideration of Amendment No. 1 to the North Baffin Regional Land Use Plan

Thank you for your letter of August 23, 2018 regarding proposed Amendment No. 1 to the North Baffin Regional Land Use Plan – Railway to Steensby Inlet and the desire of the Baffinland Iron Mines Corporation (BIMC) to have Amendment No. 1 reconsidered by the Nunavut Planning Commission (NPC).

Nunavut Tunngavik Incorporated (NTI) appreciates this opportunity to provide our views on this matter. As indicated by the NPC, proposed Amendment No. 1 for a Mary River Transportation Corridor (Railway to Steensby) was rejected by the Minister of Aboriginal Affairs and Northern Development and the Minister of the Environment of the Government of Nunavut in April of 2014. Simultaneously, both Ministers approved Amendment No. 2 for the Milne Inlet Tote Road and Marine Transportation Corridor.

Recently, Amendment No. 3 has been approved to include a railway within the transportation corridor from the Mary River mine site to Milne Inlet. Amendment No. 3 replaces Amendment No. 2.

At this juncture, BIMC has requested, in a letter dated March 23, 2018, that the NPC reconsider Amendment No. 1. NPC has proposed two options to address BIMC's request. The first proposed option is to use the wording in Amendment No. 3 to update Amendment No. 1. The rationale for this option is that the NPC and Nunavut Impact Review Board (NIRB) jointly reviewed the Steensby Inlet railway proposal and the NIRB provided a project certificate in December 2012. The second proposed option is to use the wording of Amendment No. 3 to recommence a public review of proposed Amendment No. 1.

NTI has serious concerns with both of the proposed options. NTI's view is that BIMC has not provided sufficient information to support a reconsideration of Amendment No. 1 or to meet the requirements of sections 3.5.11 or 3.5.12 of the North Baffin Regional Land Use Plan (NBRLUP). Section 3.5.11 requires an amendment application to include an assessment of

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cumulative effects of the proposed amendment. The original amendment proposal did not consider the cumulative effects of a Steensby Inlet railway in addition to a Milne Inlet railway as this transportation measure was not contemplated at the time. The joint NPC and NIRB review did not address the significant addition of a second railway line. At the time of the joint review, the terrestrial component of the transportation corridor was a road from the Mary River mine site to Milne Inlet. BIMC's environmental impact submissions and cumulative effects assessment, from that review, do not address the environmental, social and cumulative impacts of a second railway line.

NTI's view is that the cumulative effects assessment requirement under section 3.5.11 of the NBRLUP cannot be met through a reconsideration of Amendment No. 1 that simply substitutes wording from Amendment No. 3. BIMC's original proposal for an amendment to the NBRLUP for a Steensby Inlet railway transportation corridor did not contemplate an existing railway to Milne Inlet and this important factor must be considered. NTI is also of the view that the public review requirements of section 3.5.12 of the NBRLUP and the guidelines set out in Appendices J and K will not be met without BIMC providing additional information on potential environmental, social and cumulative impacts, particularly on nearby communities.

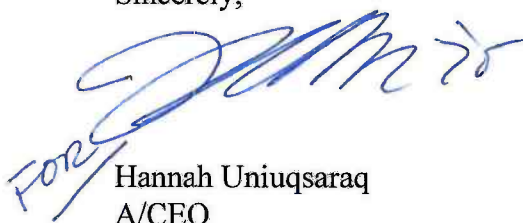
NTI proposes that if there is an interest in pursuing an amendment for a railway to Steensby Inlet, that BIMC be requested to submit a revised amendment application that takes into account all the new relevant factors that should be considered in the review, or reconsideration, of the proposed amendment including the provision of a cumulative effects assessment that addresses the addition of a second railway line.

In assessing the options provided by NPC, as well as the option of requesting BIMC to revise their original amendment application, it is clear that with any of the options, a full public review will be necessary. As indicated in our May 8th letter, Inuit are concerned about a potential railway to Steensby, in light of a railway to Milne Inlet and need to be heard on this issue. It is also worth noting that the Ministerial rejection from the Government of Canada on April 28, 2014, includes the following statement: "It is my expectation that the Commission will publically solicit feedback on potential recommendations from appropriate parties, including government officials, prior to issuing its revised recommendation to Ministers".

We also note that NTI was not a party to the previous discussions on Amendment No. 1 that occurred before the Nunavut Planning and Project Assessment Act came into force. For this reason, as well as the other reasons articulated, NTI favours a full public review of the amendment to ensure that we are fully apprised of all pertinent and current information and views before engaging in any decision-making regarding the amendment.

We look forward to working with you on this important matter.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Hannah Uniuqsaraq', with the word 'For' written vertically to the left.

Hannah Uniuqsaraq
A/CEO

CC: Pauloosie Suvega, Deputy Minister of Environment, Government of Nunavut
David Rochette, Regional Director General, Nunavut, Government of Canada



September 28, 2018

William Napier
Owner Representative
Baffinland Iron Mines Corporation
2275 Upper Middle Road East
Oakville, ON L6H 0C3

Sent via email: william.napier@baffinland.com

Dear Mr. Napier,

Re: Recommencement of Amendment to North Baffin Regional Land Use Plan for Railway to Steensby Inlet

In April 2008, Baffinland Iron Mines Corporation (**BIMC**) submitted a project proposal to the Nunavut Planning Commission (**NPC**) advising of its intention to construct a railway from the Mary River Mine Site towards Steensby Inlet. A portion of the proposed railway is subject to the North Baffin Regional Land Use Plan (**NBRLUP**). The NPC issued a positive conformity determination and asked the Nunavut Impact Review Board (**NIRB**) to conduct a joint public review of the proposed transportation corridor as a plan amendment (the **South Railway Amendment**). In 2014, the federal and territorial Ministers rejected the South Railway Amendment with written reasons. I write to inform you that the Commissioners have met to consider the South Railway Amendment, and have decided recommence the public review of that amendment.

Because the South Railway Amendment is an ongoing matter, the NPC considers the *Nunavut Planning and Project Assessment Act* (Canada) (**NuPPAA**) and the NPC's Internal Procedure for Amendments to Land Use Plans (the **Internal Plan Amendment Procedure**) to be applicable to the South Railway Amendment. In the original public review of the South Railway Amendment with the NIRB between 2008 and 2012, the Commissioners did not themselves attend the NIRB's project review hearings, as sections 3.5.11 and 3.5.12 of the NBRLUP identify the plan amendment public review process as "conformity requirements" which had been delegated to staff. Going forward, the Commissioners will be involved throughout plan amendment proceedings as required by the NPC's Internal Plan Amendment Procedure.

Based on section 62(2) and section 59(2) of the *Nunavut Planning and Project Assessment Act* (Canada) (**NuPPAA**), the Commissioners have decided that they will undertake a further public review of the South Railway Amendment that takes into account current and relevant factors affecting the project. The Commissioners reached this decision upon a review of BIMC's request to reconsider Amendment #1, as well as the following materials:

1. 2015-03-23 Plan Amendment Internal Procedure
2. 2011-01-21 Draft EIS_Executive summary (excerpt)
3. 2013-12-09 NPC Ltr to Minister AAND GN Re NBRLUP Amendment
4. 2013-12-09 Recommended NBRLUP Amendment No 1
5. 2014-04-28 AANDC Minister response to NBRLUP Amendment recommendations
6. 2014-04-28 GN DOE Minister response to NBRLUP Amendment recommendations
7. 2014-06-05 Government of Canada Recommended changes to Amendment No 1
8. 2014-05-22 Detailed GN Comments on NPC Recommendation re Amendment 1 to the NBRLUP
9. 2018-05-29 Notice of Approval of NBRLUP Amendment No 3
10. 2018-08-23 NPC Letter re Amendment No 1 to the NBRLUP
11. 2018-09-14 GOC response re Amendment No 1 process
12. 2018-09-20 GN Response re Amendment No 1 process
13. 2018-09-20-NTI response re Reconsideration of Amendment No 1 to the North Baffin Regional Land Use Plan

The Government of Canada's amendment rejection letter in 2014 urged the NPC to "...publicly solicit feedback on potential recommendations from appropriate parties, including government officials, prior to Issuing its revised recommendation to Ministers." Canada's latest letter dated September 14, 2018 also recommended the Commission ensure it had enough public feedback prior to making an informed decision, notes several "potentially significant changes" have occurred, and said it would support a new public review if requested by the planning partners. On September 20, 2018, Nunavut Tunngavik Inc. noted that BIMC's original application did not consider the cumulative effects of a railway to Steensby as well as a railway to Milne Inlet and recommended that a public review was necessary.

The NPC requests BIMC provide updates on the materials filed in support of the amendment application to reflect changes in the Mary River Project since the original materials were submitted, including consideration of a second railway North to Mile Inlet, or other projects that have been proposed or approved since that time. BIMC is also encouraged to provide suggested revisions to the wording of the amendment as it did as part of the Amendment #3 public review process.

The Commission believes that it is appropriate to recommence a public review on the basis of the materials presently before the NPC, and will structure future notices and timelines anticipating the filing of additional information and potential revisions to the wording of the amendment application before the public or other participants would be expected to provide comments.

Please note that in order for updated information requested from BIMC to be considered by Commissioners during their December 2018 meeting, this information would need to be provided by November 9, 2018 or by January 18, 2019 to be considered during the February 2019 meeting.

Respectfully,



Sharon Ehaloak, Executive Director
Nunavut Planning Commission

cc: NBRLUP Distribution List



SEP 3 0 2018

Ottawa, Canada
K1A 0A6

Ms. Elizabeth Copland
Chairperson
Nunavut Impact Review Board
PO Box 1360
CAMBRIDGE BAY NU X0B 0C0

Via email: ecopland@nirb.ca; rbarry@nirb.ca; info@nirb.ca

Dear Ms. Copland :

Thank you for your letter of August 31, 2018, and the enclosed Report on the Nunavut Impact Review Board's assessment of Baffinland Iron Mine Corporation's proposed Production Increase Project, which would modify the existing Mary River Iron Mine Project, presently regulated under Project Certificate No. 005.

The Ministers of Transport, Environment and Climate Change, Natural Resources, Fisheries, Oceans and the Canadian Coast Guard, and I have the regulatory jurisdiction for authorizing the Mary River Project to proceed. As the responsible Ministers, we are required to accept, reject or vary the terms and conditions recommended in the Report. This role is established in section 12.8.3 of the *Nunavut Agreement*, which is brought forward into legislation in section 112 of the *Nunavut Planning and Project Assessment Act* (the Act).

As described in the Board's Report, the Nunavut Impact Review Board has assessed the proposal by way of a reconsideration of the terms and conditions of Project Certificate No. 005, conducted under section 112 of the Act. The Board concluded that only two of the three elements of the Production Increase Proposal should be allowed to proceed at this time, being careful to express no opinion as to whether the third element should proceed after further assessment as part of Baffinland's Phase 2 Project Proposal, already under assessment by the Board in a separate process.

Having carefully considered the Board's Report, the responsible Ministers accept the Review Board's recommendation that the following two activities included within the proposal can be, and hereby are, approved to proceed, subject to any further regulatory requirements that apply:

- the addition of a 15 ML diesel fuel tank to the existing Fuel Storage Facility at Milne Port; and
- the installation of a new 380-person accommodations camp at Milne Port.

The responsible Ministers agree that no additional changes to the existing terms and conditions of Project Certificate No. 005 are required at this time for these activities to proceed in a manner that is consistent with the objectives set out in Article 12, Section 12.2.5 of the *Nunavut Agreement*.

Baffinland has also proposed to increase the volume of ore from the current limit of 4.2 million tonnes of ore per annum (Mt/a) to 6 Mt/a, which would be transported by truck on the Milne Inlet Tote Road from the Mary River Mine site to Milne Port and subsequently shipped out of Milne Port during the open water season.

The Board declined to approve this change to the terms and conditions at this time, being careful to emphasize that the change is still under consideration by the Board within Baffinland's Phase 2 Project Proposal.

In response to the Board's Report, the Qikiqtani Inuit Association wrote to me, strongly expressing the view that this decision did not sufficiently take into account mitigations and environmental management strategies that the Association and Baffinland were jointly proposing as protective of the environment. These management strategies form part of what collectively they are referring to as their "Project Stabilization Approach". The Qikiqtani Inuit Association went on to say that this decision risked the continued operation of the existing Mary River Project, with consequential risks to the interests of the region the Association represents, as well as to the orderly continued impact monitoring and mitigation measures and other benefits to Inuit of the ongoing project. The Qikiqtani Inuit Association explained that they strongly support the Production Increase Proposal as a method of furthering Inuit aspirations in the region.

The responsible Ministers acknowledge and share many of the Board's concerns about information deficiencies on the potential long term impacts of increased shipping, primarily to marine mammals, and how these impacts could be effectively monitored for, avoided, mitigated and managed. We also agree with the Board that Baffinland did not fully demonstrate how dust generated from increased traffic on the Tote Road can be minimized, in order to limit potential effects on the adjacent freshwater, marine, sea ice and terrestrial environment; how dispersal toward communities can be prevented; or what mitigations will be employed if effects are greater than anticipated. The concerns raised in the Board's Report are consistent with many of the issues federal departments and others raised in their written submissions.

We must balance a number of competing issues and interests here. We are concerned about the interests of workers, and the socio-economic impacts that annual stoppages in mining operations would have each fall once Baffinland reaches its current yearly production limit. We are also concerned about the long-term viability of the Mary River Mine, and cognizant of QIA's concern that the economic viability of the project depends on the Production Increase Proposal. The QIA is deeply involved in the project in many ways, including financially, and therefore very well informed of the economics of the project, and the consequential risks to the project.

The Premier of Nunavut has also written to me, indicating that production interruption is undesirable, and urging a swift decision to avoid the disruption to employment that would follow from a halt in production.

For that reason, acting under section 112(6)(b) of the Act, we therefore will vary the terms and conditions to allow a time-limited increase in production and transport of ore, pending completion of the Board's assessment of the Phase 2 Project Proposal. On our review of the available information, we have concluded that – at least until the end of the 2019 shipping season – maintaining or re-imposing the production and transport caps at 4.2 Mt/a is both more onerous than necessary to adequately mitigate impacts, and would undermine the viability of the project and work against the regional interest in that project continuing. The specifics of the terms and conditions are as follows:

179(a) Until December 31, 2019, the total volume of ore shipped via Milne Inlet may exceed 4.2 million tonnes per year, but must not exceed 6.0 million tonnes in any calendar year. After December 31, 2019, the maximum total volume of ore shipped via Milne Inlet in a calendar year returns to 4.2 million tonnes per year, unless this condition has been further modified under s. 112 of the Act.

179(b) Until December 31, 2019, the total volume of ore transported by truck on the Milne Inlet Tote Road may exceed 4.2 million tonnes per year, but must not exceed 6.0 million tonnes in any calendar year. After December 31, 2019, the maximum total volume of ore transported by truck on the Milne Inlet Tote Road in a calendar year returns to 4.2 million tonnes per year, unless this condition has been further modified under s. 112 of the Act.

Allowing the production increase will allow the Inuit of the region the opportunity to maintain and more fully realize the economic and other benefits of the mine and the Qikiqtani Inuit Association's agreements with Baffinland.

We also add to the existing Term and Condition No. 10 (Air Quality – Dust Management and Monitoring Plan) to include implementation:

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

Prior to reaching our determination, the responsible Ministers also considered the formal commitments that were reached between Baffinland and the Qikiqtani Inuit Association to address specific issues of concern, including terrestrial and marine impacts. The Qikiqtani Inuit Association has stated that it believes the impacts

associated with the production increase are reasonable, particularly when considered in light of the "Project Stabilization Approach" agreed to with Baffinland. To this end, it is our full expectation that Baffinland follow through on these commitments as they are an integral link to the success of the Production Increase Proposal. The terms and conditions jointly proposed by the Qikiqtani Inuit Association and Baffinland include a third-party verification process, and on the basis of sections 112(6) and (7) of the Act, we will adopt this as follows:

<i>Term and Condition No.</i>	<i>179 (c)</i>
<i>Category:</i>	<i>Operational Variability/Flexibility</i>
<i>Responsible Parties:</i>	<i>The Proponent</i>
<i>Project Phase:</i>	<i>Operations</i>
<i>Objective:</i>	<i>To ensure that commitments made by the proponent with respect to the 2018 production increase and delivery of benefits to Inuit are adhered to, and, can be determined through a body of evidence.</i>
<i>Term or Condition:</i>	<i>The proponent shall be required to resource and support a third party to conduct performance audits of commitments made by the proponent in relation to both the IIBA and every proponent commitment and every term or condition of the Project Certificate relating to environmental management of the tote road component or environmental management related to shipping.</i>
<i>Reporting Requirements:</i>	<i>On a bi-annual basis, the proponent shall file a Performance Audit Report with NIRB. This report shall include the findings of the third-party auditor, and, Baffinland's commitment to addressing the findings of the auditor. This term and condition will remain in force for the duration of the Mary River project, unless it is modified under the Nunavut Planning and Project Assessment Act.</i>

To address concerns around impacts to marine mammals, and problems with compliance and enforcement of terms and conditions in Project Certificate No.005 relating to ship-based observer programs, noise exposure assessments, and the identification of other mitigation measures that have the potential to further reduce potential impacts to marine mammals, on the basis of sections 112(6) and (7) of the Act, we are adding the following two terms and conditions:

The proponent shall collaborate with the Marine Environment Working Group to develop impact avoidance or mitigation strategies for the protection of the marine environment. The proponent shall implement any direction from the Department of Fisheries and Oceans for any avoidance or mitigation measures, including cessation of any activity, for the protection of the marine environment.

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

Results of the observer program shall be provided in the Annual Report to the Board. Further, Baffinland shall report annually all data it generates from the implementation of the monitoring of marine impacts that it is required to implement pursuant to the Terms and Conditions of the Project Certificate.

Recognizing the concerns of the Qikiqtani Inuit Association and those most affected by the Project, and their expressed desire to actively engage with the Board with respect to Project monitoring, the Ministers also encourage the Board to host an annual marine monitoring and marine mitigation workshop in the community of Pond Inlet. Such a workshop would allow for direct involvement of the community in the review of project monitoring data, including but not limited to information collected under community-based monitoring programs. Ideally, such a workshop would be scheduled at a time which best aligns with the availability of monitoring results and review of the Annual Monitoring Report, yet prior to the commencement of the shipping season such that additional mitigations can be applied if warranted. Such a workshop should be held for the duration of the production increase.

Finally, the impacts of the production increase need to be more broadly examined during the Phase 2 reconsideration, and it will be important to integrate the experience, knowledge and data gained over the course of the next two production years into that review process.

We commend the Board on the extensive work undertaken on this key development project as it is very much appreciated. We would remind all interested parties that our acceptance of the Board's findings and heavy reliance on the Board's identification of issues and concerns reflects a high level of satisfaction with the Board's work.

On behalf of my colleagues, I would like to acknowledge the efforts of the Board and its staff to complete the reconsideration process in an expedited manner while meeting the objectives set out in Article 12 of the *Nunavut Agreement*.

Sincerely,



Hon. Dominic LeBlanc, P.C., Q.C., M.P.



Hon. Carolyn Bennett, M.D., P.C., M.P.

c.c.: The Honourable Jonathan Wilkinson, P.C., M.P.

The Honourable Amarjeet Sohi, P.C., M.P.
The Honourable Marc Garneau, P.C., M.P.
The Honourable Catherine McKenna, P.C., M.P.

EXTERNAL ADDRESSES

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October 30, 2018

**Schedule of Amendments to the Nunavut Impact Review Board's Mary River Project Certificate
[005]**

AMENDMENT NUMBER	DATE OF AMENDMENT	TYPE OF AMENDMENT
01	May 28, 2014	Amendment of Project Certificate to reflect modifications to the Project associated with the Early Revenue Phase Proposal
02	October 30, 2018	Amendment of Project Certificate to reflect modifications to the Project associated with the Production Increase Proposal

1.0 BACKGROUND

Whereas:

A. Pursuant to the *Nunavut Land Claims Agreement (NLCA)*, the Nunavut Impact Review Board (Board or NIRB) has completed a review of the potential ecosystemic and socio-economic effects of the Mary River Project Proposal, NIRB No. 08MN053 (Mary River Project or Project);

B. Following the issuance of the Project Certificate, Baffinland applied to the NIRB to conduct further assessment and reconsideration of the terms and conditions in the Project Certificate to reflect additional activities to be carried out under the Early Revenue Phase Proposal and the Board determined that it was appropriate to assess the potential ecosystemic and socio-economic effects of the Early Revenue Phase Proposal and reconsider whether, under Section 12.8.2 of Article 12 of the NLCA, modifications to the terms and conditions of the original Project Certificate were necessary to reflect the projected effects of the Early Revenue Phase Proposal;

C. The Board has considered the list of commitments made by Baffinland Iron Mines Corporation (Baffinland or the Proponent) throughout the NIRB's review and during the NIRB Final Hearing for the Project and the Board has every expectation that the Proponent will fulfill the commitments made during the Final Hearing, the 12.8.2 Public Hearing associated with the Early Revenue Phase Proposal, within its Final Environmental Impact Statement (FEIS), FEIS Addendum, and as contained within supporting documentation submitted during the review of the Project and assessment of effects and reconsideration associated with the Early Revenue Phase Proposal, not just the commitments that are expressly included as terms and conditions in this Project Certificate;

D. The Board has determined, pursuant to Sections 12.5.5 and 12.8.2 of Article 12 of the NLCA, that, taking into account the implementation of the measures necessary to prevent or mitigate the potential adverse environmental and socio-economic effects associated with the Project and set out as terms and conditions in this Project Certificate (as amended), the Mary River Project and Early Revenue Phase Proposal are not likely to cause significant adverse ecosystemic and socio-economic effects;

E. The Board has found, pursuant to Sections 12.5.5 and 12.8.2 of Article 12 of the NLCA and taking into account all matters relevant to its mandate including Section 12.2.5, that the Mary River Project and Early Revenue Phase Proposal will enhance and protect the existing and future well being of the residents and communities of the Nunavut Settlement Area;

F. The Minister of Aboriginal Affairs and Northern Development Canada has accepted the NIRB Final Hearing Report for the Mary River Project (September 2012), the NIRB Public Hearing Report for the Early Revenue Phase Proposal (April 2014) and the recommended terms and conditions contained in those Reports that are now included in the Project Certificate (as amended), subject to the Minister's direction to modify specific recommended terms and conditions as set out in the Minister's April 28, 2014 correspondence; and

G. Recognizing the importance of co-ordination, integration and avoiding duplication with other monitoring requirements in permits, licences and other authorizations, the project-specific monitoring program, provided as Appendix A to this Project Certificate (as amended), will be issued in final form after key regulatory authorizations, including land use permits, water licences and mineral leases, are issued for both the Mary River Project and the Early Revenue Phase Proposal activities.

Now therefore, the Nunavut Impact Review Board pursuant to Sections 12.5.12 and 12.8.3 of Article 12 of the Nunavut Land Claims Agreement, and (as applicable to the Production Increase Proposal), also pursuant to Section 112 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2, issues this amended Project Certificate for the Mary River Project, including the Early Revenue Phase Proposal and the Production Increase Proposal, to Baffinland Iron Mines Corporation, subject to the terms and conditions contained herein.

2.0 PROJECT DESCRIPTION

The Mary River Project (the Project) as originally proposed consisted of mining iron ore from the reserve at Deposit No. 1 at a nominal production rate of 18 Million tons per year (Mt/a). The Project includes the extended exploration, construction, operation, closure, and reclamation of an open-pit mine and associated infrastructure for extraction, transportation and shipment of iron ore. There are 3 main project locations – the mine site, Milne Port north of the mine site, and Steensby Port south of the mine site. Milne Port is connected to the mine site by the Milne Inlet Tote road, approximately 100 kilometers (km) in length.

The Mary River Early Revenue Phase (ERP) Proposal is an amendment to the Mary River Project, that involves the extraction of up to an additional 4.2 million tonnes per year (Mt/a) of iron ore from the Mary River mine site, which will be transported by truck along the Milne Inlet Tote Road and shipped from Milne Port to European markets during the open water season. The ERP is in addition to the Mary River Project as originally proposed and outlined above.

The ERP construction phase is expected to last two years, with ERP operations to continue for the duration of the mine life (i.e., 21 years), running in conjunction with the Mary River Project as originally proposed.

The Mary River Project as originally proposed included construction of a railway approximately 150 kilometers (km) in length to connect the Mine Site to Steensby Port.¹ For the construction period, supplies and equipment required for construction at the Mine Site and the northern portion of the Railway would be received through Milne Port. Likewise, construction equipment and supplies for Steensby Port and the southern portion of the Railway would be received at Steensby Port.

It was expected that Steensby Port facilities and the railway would take up to four years to construct. During construction, supplies would be brought to both Milne Port and Steensby Port during the open water season. Once the railway is operational, 18 Mt/a of iron ore will be transported by Railway and shipped from Steensby Port. Shipping of iron ore will occur year round and will require vessels with icebreaking capabilities. When Steensby Port is operational, Milne Port will only be used occasionally

¹ The proposed alignment of the Railway was provided as an exhibit at the Final Hearing; see NIRB Final Hearing File No.: 08MN053, Exhibit #3, Cover Letter and Map book From Baffinland to the Nunavut Planning Commission With Respect to the Mary River Railway Corridor On Inuit Lands, Baffinland Iron Mines Corporation, filed by Baffinland on July 16, 2012.

for the delivery of oversized equipment for the Mine Site. The main destination for the iron ore is European steel makers.²

The ERP Proposal involves, in addition to the extraction of up to an additional 4.2 million tonnes (Mt) per year of iron ore from the Mary River mine site and transportation of this ore via the Milne Inlet Tote Road to Milne Port noted above, the development of additional infrastructure at Milne Port. The additional infrastructure will include the construction of a fixed ore dock, 4.2 Mt ore stockpile and reclaim area, 3500 tonnes per hour ship loaders, camp expansion to accommodate 60 workers and the extension and relocation of the airstrip to the west of the proposed ore stockpile. The shipment of ore from Milne Port to markets in Europe will be undertaken during the open water season only using contract vessels of approximately 50,000 deadweight tonnage (DWT) to 110,000 DWT.

In early 2018, Baffinland identified that the road haulage limit of 4.2 million tonnes per year (Mt/a) established by Term and Condition 179(b) of the Project Certificate had been exceeded in 2017 by approximately 7.5% with 4.54 Mt of ore being shipped to Milne Port via the Tote Road in 2017. On April 30, 2018 the NIRB received the “Production Increase, Fuel Storage and Milne Port Accommodations Modification Proposal” (Production Increase Proposal) from Baffinland requesting amendment of Conditions 179(a) and 179(b) of the Mary River Project Certificate No. 005 to allow for an increase from 4.2 Mt/a to 6 Mt/a in the maximum volume of ore trucked from the Mary River mine site to Milne Port via the Tote Road and shipped to market. The Production Increase Proposal also requested approval of two additional changes to the Project: the addition of a 15 ML diesel fuel tank within the existing Fuel Storage Facility at Milne Port, and installation of a new 380-person accommodation at Milne Port.

On August 31, 2018 the NIRB issued its Reconsideration Report and Recommendations in respect of the changes to the Project associated with the Production Increase Proposal. While the Board recommended approval of the fuel increase and installation of new accommodations at Milne Port, it did not recommend that the production increase be allowed to proceed based on concerns and uncertainty associated with potential impacts on air quality and terrestrial wildlife arising from dust emissions associated with the additional road haulage of ore and the potential for effects on the marine environment, marine mammals and fish and Inuit harvesting associated with increased shipping of ore at Milne Port.

On September 30, 2018 the Ministers of Intergovernmental Affairs, Northern Affairs and Internal Trade and Crown-Indigenous Relations, on behalf of the Responsible Ministers (the Ministers) accepted the Board’s recommendation to allow the fuel increase and installation of new accommodation at Milne Port without amendment to the Project Certificate. The Ministers also decided to allow the increased transportation of ore to Milne Inlet and associated shipping increase for a limited time, to the end of the 2019 shipping season, until the assessment of Baffinland’s “Phase 2 Development” amendment is completed by the NIRB and relevant Ministers. Under Section 112(6)(b) of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*) the Ministers therefore recommended varying term and condition [179\(a\) and \(b\)](#) as noted below for Amendment 2 of this Project Certificate. In addition, reflecting the NIRB’s concerns regarding the potential for ecosystemic effects in respect of air emissions along the Tote Road, the Ministers also recommended varying term and condition 10. Reflecting the Board’s concerns about the potential for effects associated with increased ore shipping on

² For a more detailed description of the Project, see the Project Description as provided in the Final Environmental Impact Statement filed by Baffinland Iron Mines Corporation, NIRB File No.: 08MN053, February 14, 2012.

the marine environment, under Sections 112(6) and (7), the Ministers directed the addition of three new terms and conditions: term and condition 179(c), term and condition 183 and term and condition 184.

3.0 IMPLEMENTATION

This Project Certificate is implemented by authorizing agencies in accordance with the reviewability section of the NLCA (Section 12.9.7):

“A licence, permit, certificate or other governmental approval which implements or incorporates any term or condition of a NIRB project certificate may not be called into question in a court of law on the grounds that the issuing agency thereby fettered its discretion or otherwise acted without jurisdiction, when implementing any term or condition of a NIRB project certificate.”

If the Qikiqtani Inuit Association or other Designated Inuit Organization, or person or body that would normally have standing has concerns that any term or condition is not being implemented, these parties may seek a determination before the appropriate court regarding whether or not the terms and conditions in the project certificate have been implemented.³

3.1 Overview of NIRB Monitoring Program

As set out in Sections 12.7.1 and 12.7.2 of Article 12 of the NLCA the NIRB has the jurisdiction to establish a project-specific monitoring program to: measure the ecosystemic and socioeconomic effects of a project; assess whether the project is in compliance with the prescribed project terms and conditions; share information with regulatory agencies to support the enforcement of land, water or resource use approvals and agreements; and to assess the accuracy of predictions contained in the environmental impact statements. Given the Board’s application of the precautionary approach to several aspects of the assessments for the Mary River Project and the Early Revenue Project Proposal, in the Board’s view project-specific monitoring will play a crucial role in addressing the uncertainty regarding project effects and enabling all parties to adapt mitigation measures on an ongoing basis to ensure the Project’s negative effects are prevented or limited to the extent possible.

The role of the Board with respect to the establishment of monitoring programs is to focus the terms and conditions in relation to the Project. With respect to existing or future general regional and territorial monitoring programs that may include some of the same monitoring parameters/indicators as the project-specific monitoring program, the NLCA also directs the NIRB to avoid duplication but facilitate co-ordination and integration between the project-specific monitoring programs required by the NIRB and more general programs and initiatives such as the Nunavut General Monitoring Plan.⁴ Where the requirements of regional or territorial programs are more extensive or substantively different than those established through the Project Certificate (as amended), at all times the Proponent must ensure compliance with the Project Certificate terms and conditions (and any subsequent amendments).

³ See Section 12.10.5 of the NLCA

⁴ See the discussion in Section 5.10.3 of the report and Sections 12.7.4 and 12.7.5 of the NLCA.

In order to co-ordinate, integrate and avoid duplication with other monitoring programs, but also to ensure that the NIRB's project-specific monitoring program yields the information required to measure effects and adequately assess compliance with terms, conditions, regulatory instruments and agreements, the NIRB's monitoring program will continue to be developed through consultation with responsible authorities, the resource and land owners and the proponent as the remaining regulatory instruments for the Project are developed. Following the issuance of this Project Certificate (as amended) by the NIRB, the framework for a project-specific monitoring program will be developed and will be provided in draft form as Appendix A to the Project Certificate. As noted in the Preamble, this framework cannot be issued in final form until key regulatory authorizations, including land use permits, water licences, mineral leases, etc. are issued so that the monitoring program supplements and supports but does not duplicate the monitoring requirements in regulatory and land use instruments⁵. Prior to finalization, the Proponent will be required to comply with all aspects of the draft framework as directed by the NIRB.

3.2 General Principles of Interpretation Applicable to Terms and Conditions:

In order to view the project-specific terms and conditions set out within this Project Certificate in the appropriate context, the following general principles of interpretation apply to the Project Certificate in its entirety, with all terms and conditions being interpreted in accordance with:

- a. The NIRB's Final Hearing Report (namely NIRB File No.: 08MN053, Final Hearing Report for the Mary River Project Proposal, September 14, 2012 available from the NIRB's registry);
- b. The NIRB's Public Hearing Report (namely NIRB File No.: 08MN053, Public Hearing Report for the Mary River Project: Early Revenue Phase Proposal, March 17, 2014) and the variances to the amended terms and conditions recommended in the Public Hearing Report as set out in the April 28, 2014 letter from the Minister of Aboriginal Affairs and Northern Development (both available from the NIRB's registry);
- c. The rights, responsibilities, authorities and jurisdiction granted under the Nunavut Land Claims Agreement (NLCA);
- d. The limits and obligations imposed under laws of general application applicable to the Proponent or any party referred to in the term and condition, as those laws may be amended over time (e.g. privacy legislation, worker's health and safety, etc.);
- e. The specific jurisdictional and policy limits applicable to authorizing agencies, Nunavut Tunngavik Incorporated, the Qikiqtani Inuit Association, or other regulatory authority with jurisdiction in respect of the Project;
- f. Where terms and conditions include specific references to items that must be taken into consideration or included in work plans, etc. these specific references are intended to establish minimum expectations but are not intended to limit the Proponent or prevent the

⁵ As Baffinland's request for reconsideration of the Project Certificate to reflect the Early Revenue Phase Proposal was received by the Board less than a month following the issuance of the original Mary River Project Certificate, the NIRB has deferred developing the monitoring framework for the Mary River Project as originally proposed until the permits and amended licenses associated with the Early Revenue Phase Proposal activities are issued.

Proponent from undertaking additional measures beyond those expressly prescribed in such terms and conditions; and

- g. As noted in the Final Hearing Report and the Public Hearing Report, for those items where a more stringent version of the precautionary principle has been applied, it is the Board's expectation that the adaptive management strategies chosen will be highly responsive to early warning signs that risks may materialize, and that rather than waiting for impacts to be noted before mitigation measures are triggered, thresholds and triggers will be set to require responses long before adverse impacts are likely.

3.3 Format of Terms and Conditions:

Wherever possible, the NIRB has used the following format for the project-specific terms and conditions set out within this Project Certificate, so as to provide clear direction on the intended application, objectives and reporting requirements:

Category: Identifies the relevant environmental component or project activity to which the term and condition applies. Wherever possible categories have been labelled so as to directly associate back to the Final Environmental Impact Statement / Addendum and Environmental Impact Statement Guidelines prepared for the Project.

Responsible Parties: Identifies the parties responsible for implementation of the term and condition. While this is generally the Proponent, at times other agencies have been implicated as appropriate.

Project Phase: Identifies the phase(s) of Project development to which the term and condition is applicable. Project phase may include any one or more of the following:

- Construction – includes site preparation and staging of materials and equipment in advance of construction
- Operations
- Temporary Closure /Care and Maintenance
- Closure and Post-Closure Monitoring – includes abandonment, decommissioning and reclamation

Objective: Provides a short description of the impact or effect being mitigated. Where relevant, expectations regarding the timing for when terms and conditions will be deemed to be satisfied (i.e. sunset clause), as well as who has discretion for determining when the term or condition is satisfied has been provided.

Term or Condition: Provides specific direction on the required action or follow up. In most instances the NIRB has endeavoured to use generalized wording to allow for maximum flexibility in achieving the stated objective, however more explicit direction has been provided where deemed necessary.

Reporting Requirements: Sets out any specific reporting parameters required to measure achievement of objectives or to demonstrate compliance, as well as the required frequency of reporting. Consideration will be given to coordination of Project Certificate reporting requirements with reporting requirements as established by other regulatory instruments associated with the Project.

It should be noted that, for some of the recommended terms and conditions, a non-binding **Commentary** section has also been added following the specific term and condition as an aid to interpretation. The Commentary section reflects clarification of the term and condition, recording the common understanding and interpretation resulting from discussions and guidance provided at the Project Certificate Workshops held in Iqaluit on December 18-19, 2012 and held by teleconference on May 21, 2014. The Commentary section is offered as a reference only and is not legally binding; in the event of a conflict between the wording in the Project Certificate and the clarification provided in the Commentary, the express wording of the Project Certificate prevails.

3.4 Flexibility

It is acknowledged that the NIRB's monitoring program will have varying requirements over the course of the Project lifecycle, and that monitoring requirements will apply from construction to eventual abandonment and reclamation. In areas where there may be a need for flexibility in relation to the terms and conditions of the Project Certificate or their application, the NIRB has endeavoured to reflect this in the associated language and/or acknowledge that objectives may be achieved through various means.

The NIRB retains the ability to give additional clarification or direction on an ongoing basis through its Monitoring Officer, with respect to compliance requirements for the Project. Upon request by the Proponent or other parties, the NIRB can provide additional clarification or direction regarding implementation of Project Certificate terms and conditions.

Where the objective of a Project Certificate term or condition can be achieved through more efficient alternate means, the Proponent is encouraged to consult with the NIRB (and other parties as required) to seek acceptance of proposed alternatives.

The NIRB has the authority to reconsider the terms and conditions of the Project Certificate to ensure that the terms and conditions are achieving their purpose. Clearly the NIRB expects the Proponent to meet its obligations under this Project Certificate (and any subsequent amendments), however, the NIRB may revisit the Project Certificate if the NIRB determines that the terms and conditions are not achieving their purpose. In the event that the monitoring program needs to be modified to better achieve its purpose, the Board, the Proponent, the Designated Inuit Organization or other interested parties may cause the Board, under Section 12.8.2 of the NLCA to revisit the monitoring program, or any other terms and conditions in the Project Certificate.

3.5 Enforcement

As noted in Section 12.10.3, where the terms and conditions of the Project Certificate are implemented or incorporated by reference into permits, certificates, licences or other governmental approvals, the enforcement of the terms and conditions included in that authorization remains with the agency responsible for the authorization (i.e. Authorizing Agency). In addition, under Part 8, Article 12 of the NLCA, if the Board determines that these terms and conditions are not achieving their purpose for any reason, including instances of significant non-compliance, the NIRB may revisit the terms and conditions contained in the Project Certificate (and any subsequent amendments).

3.6 Proponent Commitments

A listing of commitments confirmed by the parties at the Final Hearing was provided within the NIRB's Final Hearing Report for the Project as Appendix A.⁶ Although some of these commitments have provided the basis for the terms and conditions set out in the Project Certificate, others, due to various reasons, such as limits on the NIRB's jurisdiction, have not been expressly included as terms and conditions in the Project Certificate. However, as noted in the Preamble to the Certificate, even for those commitments that are not included in the Project Certificate, recognizing the importance of honouring commitments to the credibility of the Board's assessment process, it is the Board's expectation that **all parties** will make best efforts to fulfill the commitments referenced in the Final Hearing, including the listing provided as Exhibit #64⁷ and the listing in Appendix A: Table of Commitments attached to the Final Hearing Report.

To support transparency and accountability associated with the Proponent's commitments, the Board requests that the Proponent provide, in an annual report to the NIRB, a summary of the status of the Proponent's progress with respect to meeting the commitments set out in Appendix A of the Final Hearing Report.

4.0 PROJECT-SPECIFIC TERMS AND CONDITIONS

4.1 General

NIRB Monitoring Responsibilities

1. The NIRB will appoint Monitoring Officers as required to monitor the Project in accordance with the purpose of a monitoring program as set out in section 12.7.2 of the Nunavut Land Claims Agreement for the full life of the Project, including closure and restoration. Subject to direction from the NIRB, the responsibilities of the NIRB Monitoring Officers will include:
 - a. Providing direction to the Proponent, the Terrestrial and Marine Environment Working Groups, regulatory agencies, and the Qikiqtaaluk Socio-Economic Monitoring Committee to supply NIRB with reports and information respecting the Project's operations, impacts and the implementation of mitigative measures;
 - b. Conducting a periodic evaluation of the monitoring program for the Project;
 - c. Compiling a report on the adequacy of the monitoring program and on the ecosystemic and socio-economic impacts of the Project; and

⁶ NIRB File No.: 08MN053, Final Hearing Report for the Mary River Project Proposal, September 14, 2012, Appendix A: Table of Commitments from the Final Hearing, at pp. A-1-A-20.

⁷ NIRB Final Hearing File No.: 08MN053, Exhibit 64, Baffinland Iron Mines Corporation, Commitments made in response to recommendations of the Government of Nunavut, Pond Inlet, July 28, 2012, filed by Baffinland on July 28, 2012.

- d. Where appropriate, recommending to the NIRB reconsideration of Project Certificate Terms and Conditions in accordance with section 12.8.2 of the Nunavut Land Claims Agreement.
- 2. The NIRB will report annually (in English and Inuktitut) on the results of its Monitoring Program for the Project.
- 3. The NIRB will schedule periodic updates regarding its Monitoring Program for the communities most affected by the Project.
- 4. The NIRB Monitoring Officers will schedule periodic site inspections at the Project, coordinating with other regulatory agencies to the extent possible.

General Regulatory Requirements

- 5. The Proponent must obtain all required federal and territorial permits and other approvals, and shall comply with the requirements of such regulatory instruments.
- 6. The Proponent shall take prompt and appropriate action to remedy any occasion of non-compliance with environmental laws and regulations and/or regulatory instruments, and shall report any non-compliance as required by law immediately. A description of all instances of non-compliance and associated follow up is to be reported annually to the NIRB.
- 7. The Proponent shall meet with respective licensing authorities prior to the commencement of construction to discuss the posting of adequate performance bonding. Licensing authorities are encouraged to take every measure to require that sufficient security is posted before construction begins.

Monitoring Records

- 8. All monitoring information collected pursuant to the Project Certificate and various regulatory requirements for the Project shall contain the following information:
 - a. The name of the person(s) who performed the sampling or took the measurements including any relevant accreditations;
 - b. The date, time and place of sampling or measurement, and weather conditions;
 - c. The date of analysis;
 - d. The name of the person(s) who performed the analysis including any relevant accreditations;
 - e. A description of the analytical methods or techniques used; and
 - f. A discussion of the results of any analysis.
- 9. The Proponent shall make its monitoring results available, to the fullest extent possible, in English and Inuktitut.
- 10. The Proponent shall keep and maintain the records, including results, of all Project-related monitoring data and analysis for the life of the Project, including closure and post-closure monitoring.
- 11. The Proponent shall maintain the Final Environmental Impact Statement and the Environmental Effects Monitoring program developed for the Project, with predictions updated as new baseline data is collected.

12. The Proponent shall establish a Project-specific web portal or web page as a means of making all non-confidential monitoring and reporting information associated with the Project available to the general public. This does not limit what the Proponent may be required to submit to the NIRB or other regulatory authorities to meet reporting requirements.

4.2 Ecosystemic Terms and Conditions

Meteorology and Climate (including Climate Change)

Term and Condition No.	1
Category:	Meteorology and Climate – Climate Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the impacts that climate change might be having on the port facilities.
Term or Condition:	The Proponent shall use GPS monitoring or a similar means of monitoring at both Steensby Port and Milne Port, with tidal gauges to monitor the relative sea levels and storm surges at these sites.
Reporting Requirements:	The Proponent shall summarize and supply these monitoring results to NIRB in the annual project report.

Term and Condition No.	2
Category:	Meteorology and Climate – Climate Change Validation and Studies
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide feedback on the impacts that climate change might be having on the Project.
Term or Condition:	The Proponent shall provide the results of any new or revised assessments and studies done to validate and update climate change impact predictions for the Project and the effects of the Project on climate change in the Local Study Area and Regional Study Area as defined in the Proponent's Final Environmental Impact Statement.
Reporting Requirements:	The Proponent shall provide new or revised assessments and studies to the NIRB, the affected communities, relevant regulatory authorities, and interested parties.

Term and Condition No.	3
Category:	Meteorology and Climate – Green House Gas Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To confirm that the Proponent is exploring and implementing concrete steps to reduce greenhouse gases.
Term or Condition:	The Proponent shall provide interested parties with evidence of continued initiatives undertaken to reduce greenhouse gas emissions.
Reporting Requirements:	The Proponent shall include relevant information in the Annual Report submitted to the NIRB.

Term and Condition No.	4
Category:	Climate Change – Consultation on Climate
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To promote public awareness and engagement of affected groups.
Term or Condition:	The Proponent shall endeavour to include the participation of Inuit from affected communities and other communities in Nunavut when undertaking climate-change related studies and research.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	5
Category:	Meteorology and Climate – Weather Monitoring Data
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide families of employees with up to date information.
Term or Condition:	The Proponent shall endeavour to explore and implement reasonable measures to ensure that weather-related information for the various Project sites is readily accessible to the public on a continual basis throughout the life of the Project
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	6
Category:	Meteorology and Climate – Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall provide the results of any emissions calculations

	conducted to determine the level of sulphur dioxide (SO ₂) emissions, nitrogen oxide (NO _x) emissions and greenhouse gases generated by the Project using fuel consumption or other relevant criteria as a basis.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Air Quality

Term and Condition No.	7
Category:	Air Quality – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall update its Air Quality and Noise Abatement Management Plan to provide for continuous monitoring at land-based monitoring stations designed to capture operations phase ship-generated SO ₂ and NO ₂ emissions at Steensby Port and Milne Port. Continuous monitoring is to be carried out through several shipping seasons at each port as required to determine that emissions are at acceptable levels.
Reporting Requirements:	The updated plan shall be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Commentary: It is anticipated that continuous monitoring rather than passive monitoring will be required at the land-based monitoring stations to identify if hourly exceedances occur.

Term and Condition No.	8
Category:	Air Quality – Greenhouse Gas Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall demonstrate through monitoring of air quality at the mine site and at the Steensby Inlet and Milne Inlet port sites that SO ₂ and NO ₂ emissions remain within predicted levels and, where applicable, within limits established by all applicable guidelines and regulations. In cases where exceedances are manifested, the Proponent shall provide an explanation for the exceedance, a description of planned mitigation, and shall conduct additional monitoring to evaluate the effectiveness of mitigative measures.
Reporting Requirements:	To be included in the Proponent's annual reporting to the NIRB.

Term and Condition No.	9
Category:	Air Quality – Greenhouse Gas Emissions
Responsible Parties:	The Proponent

Project Phase:	Construction and Operations
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall provide calculations of greenhouse gas emissions generated by activities at the Steensby Inlet and Milne Inlet port sites and other Project sources including aircraft associated with the Project. Calculations shall take into consideration, fuel consumption as measured by Baffinland's purchase and use as well as the fuel use of its contractors and sub-contractors.
Reporting Requirements:	To be included in the Proponent's annual reporting to the NIRB.

Term and Condition No.	10 modified for Production Increase Proposal
Category:	Air Quality –Dust Management and Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to air quality from dust dispersion.
Term or Condition:	<p>The Proponent shall update its Dust Management and Monitoring Plan to address and/or include the following additional items:</p> <ul style="list-style-type: none"> a) Outline the specific plans for monitoring dust along the first few kilometres of the rail corridor leaving the Mary River mine site. b) Identify the specific adaptive management measures to be considered should monitoring indicate that dust deposition from trains transporting along the rail route is greater than initially predicted. c) Outline specific plans for monitoring dustfall at intervals along and in the vicinity of the Milne Inlet Tote Road to determine the amount and extent of dustfall. d) Identify the specific adaptive management measures to be considered if monitoring indicates that dust deposition from traffic on the Milne Inlet Tote Road is greater than initially predicted. <p>The Proponent shall implement its Dust Management and Monitoring Plan, report all monitoring data to the NIRB annually, and take all adaptive management measures described in its Dust Management and Monitoring Plan if monitoring indicates that dust in the ambient air or dust deposition from the increased traffic associated with the increased volume of ore being shipped is greater than initially predicted.</p>
Reporting Requirements:	To be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	11
Category:	Air Quality – Incineration Management Plan
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to air quality from incineration activities.

Term or Condition:	The Proponent shall develop and implement an Incineration Management Plan that takes into consideration the recommendations provided in Environment Canada's Technical Document for Batch Waste Incineration (2010).
Reporting Requirements:	Updated Incineration Management Plan to be provided to the NIRB at least 60 days prior to the commencement of construction activities.

Term and Condition No.	12
Category:	Air Quality – Incineration
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to air quality from incineration activities.
Term or Condition:	Prior to commencing any incineration of on-site Project wastes, the Proponent shall conduct at least one stack test immediately following the commissioning of each temporary and permanent incinerator.
Reporting Requirements:	Stack test results to be reported to the NIRB and Environment Canada annually as required.

Noise and Vibration

Term and Condition No.	13
Category:	Noise and Vibration-Use of Explosives
Responsible Parties:	The Proponent, Fisheries and Oceans Canada
Project Phase:	Construction
Objective:	To determine appropriate protection of fish and aquatic life in the Arctic.
Term or Condition:	The Proponent is encouraged to work with Fisheries and Oceans Canada at the regulatory phase and to take a precautionary approach when selecting the overpressure threshold to be applied to explosives use for the protection of fish and aquatic life.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	14
Category:	Noise and Vibration- Noise and Vibration Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate noise and vibration at Project sites, especially living areas.
Term or Condition:	The Proponent shall conduct noise and vibration monitoring at Project accommodations sites located at the Mary River mine site, Steensby Inlet Port site, and Milne Inlet Port site. Sampling shall be undertaken during the summer and winter months during all phases of Project development.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	14 (a)
Category:	Noise and Vibration- Noise and Vibration Adaptive Management
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate potential impacts of noise to marine wildlife during project construction
Term or Condition:	The Proponent, through coordination with the MEWG as may be appropriate, shall demonstrate appropriate adaptive management for construction activities at Milne Inlet that have the potential to disrupt marine mammal species, including pile driving and ore dock construction, are undertaken.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	14 (b)
Category:	Noise and Vibration- Noise and Vibration Adaptive Management
Responsible Parties:	The Proponent
Project Phase:	Operations
Objective:	To mitigate potential impacts of noise to wildlife and people during project operations
Term or Condition:	The Proponent, through coordination with the TEWG as may be appropriate, shall demonstrate appropriate adaptive management for project activities during operations which have the potential to produce noise and sensory disturbance to wildlife and other users of project areas.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	15
Category:	Noise and Vibration- Noise and Vibration Monitoring
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, local Hamlet organizations
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enhance public safety when travelling around the Project area.
Term or Condition:	The Proponent shall collaborate to the extent possible with the Qikiqtani Inuit Association and local Hamlet organizations when undertaking consultation with all affected communities regarding railway, tote road and marine shipping operations. During these consultations, it is recommended that the Proponent provide information including video, audio, and photographic representation as well as any other aids (i.e. models) that may enhance the general public's understanding of railway, tote road and marine shipping operations, as well as all safety considerations for members of the public who may be travelling around the project area.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Hydrology and Hydrogeology

Term and Condition No.	16
Category:	Hydrology and Hydrogeology – Water Infrastructure
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To provide assurance that the potential impacts to flow and quantity of water in the Project area are minimized.
Term or Condition:	The Proponent shall ensure that the water related infrastructure or facilities that are designed and constructed, including the modification of culverts, diversion of watercourses, and diversion of runoff into watercourses along the railway, access roads, port sites, the Milne Tote Road, and other areas of the Project site, are consistent with those proposed in the FEIS and FEIS Addendum in terms of type, location, and scope and that the requirements of all relevant regulatory authorities are satisfied advance of constructing those facilities.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: It is understood that the term “consistent with those proposed in the FEIS” requires general consistency only in relation to the type, location and scope of this infrastructure and facilities, but does not limit the ability of the Proponent to refine and optimize the design, placement and construction as may become necessary to reflect site-specific conditions encountered during construction.

Term and Condition No.	17
Category:	Hydrology and Hydrogeology – Effluent Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to water bodies from effluent.
Term or Condition:	The Proponent shall develop and implement effective measures to ensure that effluent from project-related facilities and/or activities, including sewage treatment plants, ore stockpiles, and mine pit, satisfies all discharge criteria requirement established by the relevant regulatory agencies prior to being discharged into the receiving environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	18
Category:	Hydrology and Hydrogeology – Pit Lake Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enhance predictions for mine site closure conditions.

Term or Condition:	The Proponent shall carry out continued analyses over time to confirm and update, accordingly, the approximate fill time for the mine pit lake identified in the FEIS.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	19
Category:	Hydrology and Hydrogeology – Water Infrastructure Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to natural water flow.
Term or Condition:	The Proponent shall ensure that it develops and implements adequate monitoring and maintenance procedures to ensure that the culverts and other conduits that may be prone to blockage do not significantly hinder or alter the natural flow of water from areas associated with the proposed mine. In addition, the Proponent shall monitor, document and report the withdrawal rates for water removed and utilized for all domestic and industrial purposes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Groundwater/Surface Waters

Term and Condition No.	20
Category:	Groundwater/Surface Waters - Explosives
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure that the effects associated with the manufacturing, storage, transportation and use of explosives do not negatively impact the areas surrounding the Project.
Term or Condition:	The Proponent shall monitor the effects of explosives residue and related by-products from project-related blasting activities as well as develop and implement effective preventative and/or mitigation measures, including treatment, if necessary, to ensure that the effects associated with the manufacturing, storage, transportation and use of explosives do not negatively impact the Project and surrounding areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	21
Category:	Groundwater/Surface Waters – Aquatic Effects Monitoring Plan and dustfall monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations

Objective:	To mitigate potential impacts to surface and ground waters.
Term or Condition:	<p>The Proponent shall ensure that the scope of the Aquatic Effects Monitoring Plan (AEMP) includes, at a minimum:</p> <ul style="list-style-type: none"> a. monitoring of non-point sources of discharge, selection of appropriate reference sites, measures to ensure the collection of adequate baseline data and the mechanisms proposed to monitor and treat runoff, and sample sediments; and b. measures for dustfall monitoring designed as follows: <ul style="list-style-type: none"> i. To establish a pre-trucking baseline and collect data during Project operation for comparison; ii. To facilitate comparison with existing guidelines and potentially with thresholds to be established using studies of Arctic char egg survival and/or other studies recommended by the Terrestrial Environment Working Group (TEWG); and, iii. To assess the seasonal deposition (rates, quantities) and chemical composition of dust entering aquatic systems along representative distance transects at right angles to the Tote Road and radiating outward from Milne Port and the Mine Site.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	22
Category:	Groundwater/Surface Waters – Sediment and Erosion Management Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To develop appropriate sediment and erosion controls to prevent impacts to surface waters.
Term or Condition:	The Proponent shall develop a detailed Sediment and Erosion Management Plan to prevent and/or mitigate sediment loading into surface water within the Project area.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	23
Category:	Groundwater/Surface Waters – Groundwater Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to groundwater quality.
Term or Condition:	The Proponent shall develop and implement a Groundwater Monitoring and Management Plan to monitor, prevent and/or mitigate the potential effects of the Project on groundwater within the Project area.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	24
Category:	Groundwater/Surface Waters – Effluent Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to groundwater and surface waters from effluent discharge.
Term or Condition:	The Proponent shall monitor as required the relevant parameters of the effluent generated from Project activities and facilities and shall carry out treatment if necessary to ensure that discharge conditions are met at all times.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Landforms, Geology and Geomorphology, Soils and Permafrost

Term and Condition No.	25
Category:	Landforms – Additional Geotechnical Investigations
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to sensitive landforms.
Term or Condition:	The Proponent shall undertake the additional geotechnical investigations to identify sensitive landforms, modify engineering design for Project infrastructure, develop and implement preventative and/or mitigation and monitoring measures to minimize the impacts of the Project's activities and infrastructure on sensitive landforms.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	26
Category:	Landforms and Soils – Erosion Management Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To develop appropriate measures for preventing destabilization and erosion.
Term or Condition:	The Proponent shall develop and implement a comprehensive erosion management plan to prevent or minimize the effects of destabilization and erosion that may occur due to the Project's construction and operation.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	27
Category:	Landforms, Geology and Geomorphology – Natural Aesthetics
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to natural aesthetics.
Term or Condition:	The Proponent shall include within its public consultation report information related to the sentiments expressed by affected communities about the impacts that changes to the topography and landscape have had on the aesthetic value of the Project area.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	28
Category:	Landforms, Geology and Geomorphology – Permafrost
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure that permafrost integrity is maintained.
Term or Condition:	The Proponent shall monitor the effects of the Project on the permafrost along the railway and all other Project affected areas and must implement effective preventative measures to ensure that the integrity of the permafrost is maintained.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	29
Category:	Landforms, Geology and Geomorphology – Design Plans
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To confirm constructed components meet design as assessed.
Term or Condition:	The Proponent shall provide to the respective regulatory authorities, for review and acceptance, for-construction engineering design and drawings, specifications and engineering analysis to support design in advance for constructing those facilities. Once project facilities are constructed, the Proponent shall provide copies of the as-built drawings and design to the appropriate regulatory authorities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Commentary: “Acceptance” by a regulatory authority of for-construction engineering design and drawings, specifications and engineering analysis merely indicates that the authority has received the documentation but does not imply that the authority has approved the design, drawings, specifications or analysis received.

Term and Condition No.	30
Category:	Landforms, Geology and Geomorphology – Quarries
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide oversight on quarry design and management.
Term or Condition:	The Proponent shall develop site-specific quarry operation and management plans in advance of the development of any potential quarry site or borrow pit.
Reporting Requirements:	Plans to be provided to the NIRB for review and comment at least 30 days prior to commencement of construction activities.

Vegetation

Term and Condition No.	31
Category:	Vegetation – Construction and Operations
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To minimize impacts to vegetation.
Term or Condition:	The Proponent shall ensure that Project activities are planned and conducted in such a way as to minimize the Project footprint.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	32
Category:	Vegetation – Construction and Operations
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent introduction of invasive species.
Term or Condition:	The Proponent shall ensure that equipment and supplies brought to the Project sites are clean and free of soils that could contain plant seeds not naturally occurring in the area. Vehicle tires and treads in particular must be inspected prior to initial use in Project areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	33
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring

Objective:	To facilitate monitoring.
Term or Condition:	The Proponent shall include relevant Monitoring and Management Plans within its Environmental Management System, Terrestrial Environment Management and Monitoring Plan (TEMMP).
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB .

Term and Condition No.	34
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To determine baseline metal levels of soils used by berry-producing plants.
Term or Condition:	The Proponent shall conduct soil sampling to determine metal levels of soils in areas with berry-producing plants near any of the potential development areas, prior to commencing operations.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	35
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent, local Hunters and Trappers Organizations
Project Phase:	Construction and Operations
Objective:	To determine baseline metal levels in foraging caribou.
Term or Condition:	The Proponent shall undertake monitoring of baseline metal levels in organ tissue from caribou harvested within the local study area, prior to commencing operations. The Proponent is strongly encouraged to coordinate with local Hunters and Trappers Organizations regarding procurement of harvested caribou organs.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Commentary: It is anticipated that the Terrestrial Environment Working Group members will provide guidance to the Proponent on the specific tissues studied, the methods for testing and mechanics of obtaining samples.

Term and Condition No.	36
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To monitor for project-induced effects to foraging caribou.
Term or Condition:	The Proponent shall establish an on-going monitoring program for vegetation species used as caribou forage (such as lichens) near Project development areas, prior to commencing operations.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB .

Term and Condition No.	37
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent, Government of Nunavut Department of Environment
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent establishment of invasive species.
Term or Condition:	The Proponent shall incorporate protocols for monitoring for the potential introduction of invasive vegetation species (e.g. surveys of plant populations in previously disturbed areas) into its Terrestrial Environment and Monitoring Plan. Any introductions of non-indigenous plant species must be promptly reported to the Government of Nunavut Department of Environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	38
Category:	Vegetation – Adaptive Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to vegetation abundance, diversity and health.
Term or Condition:	The Proponent shall review, on an annual basis, all monitoring information and the vegetation mitigation and management plans developed under its Environmental Management System, Terrestrial Environment and Monitoring Plan (TEMMP) and adjust such plans as may be required to effectively prevent or reduce the potential for significant adverse project effects on vegetation abundance, diversity and health.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB .

Term and Condition No.	39
Category:	Vegetation – Reclamation and Revegetation
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent erosion and promote progressive revegetation of disturbed areas.
Term or Condition:	The Proponent shall develop a progressive revegetation program for disturbed areas that are no longer required for operations, such program to incorporate measures for the use of test plots, reseeding and replanting of native plants as necessary. It is further recommended that this program be directly associated with the management plans for erosion control established for the Project.

Reporting Requirements:	To be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.
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***Commentary:** It is understood that revegetation may not be possible for all those areas disturbed by project development, and that the requirements of progressive revegetation are in relation to only those “disturbed areas” that had vegetative cover prior to project development.*

Term and Condition No.	40
Category:	Vegetation – Reclamation and Revegetation
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent erosion and promote progressive revegetation of disturbed areas.
Term or Condition:	The Proponent shall include revegetation strategies in its Site Reclamation Plan that support progressive reclamation and that promote natural revegetation and recovery of disturbed areas compatible with the surrounding natural environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

***Commentary:** It is understood that revegetation may not be possible for all those areas disturbed by project development, and that the requirements of progressive revegetation are in relation to only those “disturbed areas” that had vegetative cover prior to project development.*

Freshwater Aquatic Environment including Biota and Habitat

Term and Condition No.	41
Category:	Freshwater Aquatic Environment – Setbacks
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts of runoff into freshwater aquatic habitat.
Term or Condition:	Unless otherwise approved by regulatory authorities, the Proponent shall maintain a minimum 100-metre naturally-vegetated buffer between the high-water mark of any fish-bearing water bodies and any permanent quarries with potential for acid rock drainage or metal leaching.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	42
Category:	Freshwater Aquatic Environment – Setbacks
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring

Objective:	To mitigate impacts of runoff into freshwater aquatic habitat.
Term or Condition:	The Proponent shall maintain minimum a 30-metre naturally-vegetated buffer between the mining operation and adjacent water bodies.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As used in the above Term and Condition, “mining operation” is intended to include the site of active ore removal, including excavations resulting from the extraction of ore but does not include quarries, transportation corridors or other mine infrastructure.

Term and Condition No.	43
Category:	Freshwater Aquatic Environment – Drainage
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts of runoff into freshwater aquatic habitat.
Term or Condition:	Prior to the start of construction, the Proponent must submit a Site Drainage and Silt Control Plan to the appropriate regulatory authorities for approval.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	44
Category:	Freshwater Aquatic Environment – Explosives
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts of explosives on freshwater aquatic habitat.
Term or Condition:	The Proponent shall meet or exceed the guidelines set by Fisheries and Oceans Canada for blasting thresholds and implement practical and effective measures to ensure that residue and by-products of blasting do not negatively affect fish and fish habitat.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	45
Category:	Freshwater Aquatic Environment – General
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to freshwater aquatic habitat.
Term or Condition:	The Proponent shall adhere to the No-Net-Loss principle at all phases of the project to prevent or mitigate direct or indirect fish and fish habitat losses.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	46
Category:	Freshwater Aquatic Environment – Drainage
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to freshwater aquatic habitat.
Term or Condition:	The Proponent shall ensure that runoff from fuel storage and maintenance facility areas, sewage and wastewater other facilities responsible for generating liquid effluent and runoff meet discharge requirements.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	47
Category:	Freshwater Aquatic Environment – Watercourses
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent blockages or restrictions to fish passage.
Term or Condition:	The Proponent shall ensure that all Project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams and rivers.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	48
Category:	Freshwater Aquatic Environment – Explosives
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Fisheries and Oceans Canada
Project Phase:	Construction, Operations
Objective:	To mitigate impacts to freshwater aquatic habitat.
Term or Condition:	The Proponent shall engage with Fisheries and Oceans Canada and the Qikiqtani Inuit Association in exploring possible Project specific thresholds for blasting that would exceed the requirements of Fisheries and Oceans Canada's <i>Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters</i> (D.G. Wright and G.E. Hopky, 1998).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	48 (a)
Category:	Freshwater Aquatic Environment – Arctic char
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To determine presence and health of arctic char in freshwater aquatic habitat.
Term or Condition:	The Proponent shall 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. The Proponent shall consult with the MHTO regarding the design, timing, and location of proposed surveys and ongoing monitoring.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Terrestrial Wildlife and Habitat

Term and Condition No.	49
Category:	Terrestrial Wildlife and Wildlife Habitat – Terrestrial Environment Working Group
Responsible Parties:	The Proponent, the Qikiqtani Inuit Association, the Government of Nunavut, Environment Canada, and any other agencies or interested parties as determined by the members to be appropriate
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	The TEWG will provide direction and guidance to the Proponent regarding: adding to baseline information during construction and before project operations commence; monitoring and reporting regarding effects occurring during operations; and providing advice regarding changes that may be required to make sure the management of negative impacts is effective and that lasting damage is prevented.
Term or Condition:	The Proponent shall establish a Terrestrial Environment Working Group ("TEWG") which will act as an advisory group in connection with mitigation measures for the protection of the terrestrial environment and in connection with its Environmental Effects Monitoring Program, as it pertains to the terrestrial environment. Members may consider the draft terms of reference for the TEWG filed in the Final Hearing, but they are not bound by them. The role of the TEWG is not intended to either duplicate or to affect the exercise of regulatory authority by appropriate government agencies and departments.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	50
Category:	Terrestrial Wildlife and Habitat - General
Responsible Parties:	The Proponent and other Parties as appropriate
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure appropriate and responsive adaptive management.
Term or Condition:	The Proponent shall continue to develop and implement Project-specific monitoring for the terrestrial environment, and will demonstrate appropriate refinements to design, incorporation of analytical methods and elaboration of methodologies. The monitoring plan shall contain clear

	thresholds to allow for the assessment of long-term trends and cumulative effects where project interactions are identified. Coordination and cooperation will be required where data collection, analysis and interpretation, or responsibility for mitigation and management requires the efforts of multiple parties (e.g., government, Qikiqtani Inuit Association, communities).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	51
Category:	Terrestrial Wildlife and Habitat - General
Responsible Parties:	The Proponent and/or TWEG
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To promote coordination of monitoring efforts.
Term or Condition:	The Proponent, either directly or as part of the TEWG, shall consider and, where appropriate, cooperate with relevant regional and/or community-based monitoring initiatives that raise issues or produce information pertinent to mitigating project-induced impacts. The Proponent shall give special consideration for supporting regional studies of population health and harvest programs for North Baffin caribou which help address areas of uncertainty for Project impact predictions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	52
Category:	Terrestrial Wildlife and Habitat - Caribou
Responsible Parties:	The Proponent, TEWG
Project Phase:	Construction
Objective:	To ensure best practices are used for caribou protection.
Term or Condition:	Within 3 months of issuance of the Project Certificate, the Proponent shall initiate design, and develop the timeline to test and implement means of deterring caribou from pits and other hazardous areas. A review of best practices and techniques will be undertaken at other Northern mines where interactions with caribou occur. Considerations should include temporary ribbon placement, inuksuks, or fencing and subsequent monitoring for effectiveness. These activities shall be reported back to the Terrestrial Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister; results to be reported back to the Terrestrial Environment Working Group.

Term and Condition No.	53
Category:	Terrestrial Wildlife and Habitat - Caribou
Responsible Parties:	The Proponent
Project Phase:	Construction

Objective:	To mitigate impacts to caribou from Project-related traffic.
Term or Condition:	<p>The Proponent shall demonstrate consideration for the following:</p> <ul style="list-style-type: none"> a. Steps taken to prevent caribou mortality and injury as a result of train and vehicular traffic, including operational measures meant to maximize the potential for safe traffic relative to operations on the railway, Milne Inlet tote road and associated access roads. <ul style="list-style-type: none"> i. Specific measures intended to address the reduced effectiveness of visual protocols for the Milne Inlet Tote Road and access roads/trails during times of darkness and low visibility must be included. b. Monitoring and mitigation measures at points where the railway, roads, trails and flight paths pass through caribou calving areas, particularly during caribou calving times. The details of these monitoring and mitigation measures shall be developed in conjunction with the Terrestrial Environment Working Group. c. Evaluation of the effectiveness of proposed caribou crossings over the railway, Milne Inlet tote road and access roads as well as the appropriate number. d. Development of a surveillance system along the railway corridor to identify the presence of caribou in proximity to the train tracks and operational protocols for the train to avoid collisions and enable caribou to cross the train tracks unimpeded. e. Protocols for documentation and reporting of all caribou collisions and mortalities, as well as mechanisms for adaptive management responses designed to prevent further such interactions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	54
Category:	Terrestrial Wildlife and Habitat - Caribou
Responsible Parties:	The Proponent
Project Phase:	Construction – within six (6) months of issuance of Project Certificate
Objective:	To Update the Terrestrial Environmental Management and Monitoring Plan
Term or Condition:	<p>The Proponent shall provide an updated Terrestrial Environmental Management and Monitoring Plan which shall include, but not be limited to the following:</p> <ul style="list-style-type: none"> a. Details of the methods and rationale for conducting monitoring prior to the commencement of construction; b. Monitoring for caribou presence and behavior during railway and Tote Road construction; c. Description and justification of statistical design or other means of determining effect and proposed analyses to support the conclusions drawn from monitoring impacts of the mine and related infrastructure on wildlife; d. Details of monitoring and mitigation activities, which should be established in collaboration with the Terrestrial Environment Working Group and are expected to include:

	<ul style="list-style-type: none"> i. Dust fall (fugitive and Total Suspended Particulates), that addresses methods to reduce risk to caribou forage from dust fall; ii. Snow track surveys during construction and the use of video-surveillance to improve the predictability of caribou exposure to the railway and Tote Road. Using the result of this information, an early warning system for caribou on the railway and Tote Road shall be developed for operation. e. Details of monitoring thresholds related to level of mitigation and management; and f. Details of a comprehensive hunter harvest survey to determine the effect on caribou populations and potential effects on caribou behaviour resulting from increased human access caused by upgrades to the Milne Inlet tote road (and any other roads if they are shifted from private to public use) and increase local knowledge of the mine site, including establishing pre-construction baseline harvesting data.
Reporting Requirements:	Plan to be submitted to the NIRB and the TEWG within 6 months of issuance of a Project Certificate.

Term and Condition No.	55
Category:	Terrestrial Wildlife and Habitat - Wolves
Responsible Parties:	The Proponent, Government of Nunavut Department of Environment
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate potential impacts to wolves.
Term or Condition:	<p>The Proponent shall develop an adaptive management plan applicable to wolves and wolf habitat in collaboration with the Government of Nunavut-Department of Environment (GN-DOE) to ensure compliance with the <i>Nunavut Wildlife Act</i>. Consideration must be given to the following:</p> <ul style="list-style-type: none"> a. Monitoring for active wolf dens within a 10 km radius from the mine site, under the direction and prior approval of the GN DOE, and reporting the results through NIRB's Annual Reports on terrestrial wildlife in the Potential Development Area (PDA); b. Estimating the available (glacio-fluvial materials) esker habitat within the Regional Study Area/PDA and identifying such habitat as ecologically sensitive; c. Developing "wolf indices" for presence/abundance of wolves (by conducting studies) to set a baseline pre-construction baseline; and d. Ensuring that wolf monitoring is capable of determining the relative abundance and distribution of wolves in the Project Development Area over time.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	56
Category:	Terrestrial Wildlife and Habitat – Wildlife Habitat
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure progressive reclamation of disturbed wildlife habitat.
Term or Condition:	The Proponent shall develop a strategy for the recovery of terrestrial wildlife habitat in a progressive manner that is consistent with the <i>Nunavut Wildlife Act</i> . Overall, this will require the integration of a decision-making process and the identification of mitigation responses to cumulative impacts on caribou survival, breeding propensity, and population dynamics.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	57
Category:	Terrestrial Wildlife and Habitat - Reporting
Responsible Parties:	The Proponent
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate and monitor for impacts to wildlife.
Term or Condition:	<p>The Proponent shall report annually regarding its terrestrial environment monitoring efforts, with inclusion of the following information:</p> <ul style="list-style-type: none"> a. Description of all updates to terrestrial ecosystem baseline data; b. A description of the involvement of Inuit in the monitoring program; c. An explanation of the annual results relative to the scale of the natural variability of Valued Ecosystem Components in the region, as described in the baseline report; d. A detailed presentation and analysis of the distribution relative to mine structures and activities for caribou and other terrestrial mammals observed during the surveys and incidental sightings; e. Results of the annual monitoring program, including field methodologies and statistical approaches used to support conclusions drawn; f. A summary of the chronology and level of mine activities (such as vehicle frequency and type); g. An assessment and presentation of annual environmental conditions including timing of snowmelt, green-up, as well as standard weather summaries; and h. A discussion of any proposed changes to the monitoring survey methodologies, statistical approaches or proposed adaptive management stemming from the results of the monitoring program.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	58
Category:	Terrestrial Wildlife and Habitat - Reporting
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate and monitor for impacts to wildlife.
Term or Condition:	<p>Within its annual report to the NIRB, the Proponent shall incorporate a review section which includes:</p> <ul style="list-style-type: none"> a. An examination for trends in the measured natural variability of Valued Ecosystem Components in the region relative to the baseline reporting; b. A detailed analysis of wildlife responses to operations with emphasis on calving and post-calving caribou behaviour and displacements (if any), and caribou responses to and crossing of the railway, the Milne Inlet Tote Road and associated access roads/trails; c. A description of the extent of dust fall based on measured levels of dust fall (fugitive and finer particles such as TSP) on lichens and blueberries, and ash content of caribou fecal pellets; d. A demonstration and description of how the monitoring results, including the railway, road traffic, air traffic and dustfall contribute to cumulative effects of the project; e. Any proposed changes to the monitoring survey methodologies, statistical approaches or proposed adaptive management stemming from the results of the monitoring program; f. Any updates to information regarding caribou migration trails. Maps of caribou migration trails, primarily obtained through any new collar and snow tracking data, shall be updated (at least annually) in consultation with the Qikiqtani Inuit Association and affected communities, and shall be circulated as new information becomes available.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	59
Category:	Terrestrial Wildlife and Habitat – Aircraft Disturbances
Responsible Parties:	The Proponent
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate aircraft disturbance to wildlife and Inuit harvesting.
Term or Condition:	The Proponent shall ensure that aircraft maintain, whenever possible (except for specified operational purposes such as drill moves, take offs and landings), and subject to pilot discretion regarding aircraft and human safety, a cruising altitude of at least 610 metres during point to point travel when in areas likely to have migratory birds, and 1,000 metres vertical and

	1,500 metres horizontal distance from observed concentrations of migratory birds (or as otherwise prescribed by the Terrestrial Environment Working Group) and use flight corridors to avoid areas of significant wildlife importance. The Proponent, in collaboration with the Terrestrial Environment Working Group shall develop a program or specific measures to ensure that employees and subcontractors providing aircraft services to the Project are respectful of wildlife and Inuit harvesting that may occur in and around project areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As indicated in the heading and discussion of this section in the Final Hearing Report, the intention of this section is to mitigate aircraft disturbance to wildlife, (including, but not limited to migratory birds, although these are specifically mentioned in the term and condition). It is also anticipated that the Terrestrial Environment Working Group may provide the Proponent with additional direction regarding minimum flight altitude requirements that may differ from these requirements. It is further recognized that the flight altitudes listed are provided as guidance only, and that for compliance purposes, the Proponent shall comply with flight altitude restrictions as may be prescribed by Transport Canada. It is also noted that Term and Condition #71 prescribes a slightly more stringent minimum altitude for migratory birds and unless the Terrestrial Environment Working Group provides additional direction, the minimums set out in Condition #71 will govern with respect to migratory birds specifically.

Term and Condition No.	60
Category:	Terrestrial Wildlife and Habitat – Explosives
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to wildlife from explosives.
Term or Condition:	Prior to construction, the Proponent shall develop a detailed blasting program to minimize the effects of blasting on terrestrial wildlife that includes, but is not limited to the restriction of blasting when migrating caribou, sensitive local carnivores or birds may be negatively affected.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	61
Category:	Terrestrial Wildlife and Habitat – Operations (General)
Responsible Parties:	The Proponent, TEWG
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate Project impacts to wildlife.
Term or Condition:	Whenever practical and not causing a human safety issue, a stop work policy shall be implemented when wildlife in the area may be endangered by the work being carried out. An operational definition of 'endangered' shall be provided by the Terrestrial Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	62
Category:	Terrestrial Wildlife and Habitat – Operations (General)
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent increased harvesting pressure on wildlife.
Term or Condition:	The Proponent shall prohibit project employees from transporting firearms to site and from operating firearms in project areas for the purpose of wildlife harvesting.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	63
Category:	Terrestrial Wildlife and Habitat – Public Engagement
Responsible Parties:	The Proponent, local Hunters and Trappers Organizations
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To keep communities up to date with Project operations.
Term or Condition:	The Proponent shall liaise with local Hunters and Trappers Organizations in advance of carrying out terrestrial wildlife surveys. At a minimum, The Proponent shall also meet annually in person with Hunters and Trappers Organizations to discuss wildlife monitoring and mitigation plans and address community concerns regarding wildlife interactions. The Proponent may be required to facilitate these meetings through payment of honoraria and meeting costs.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	64
Category:	Terrestrial Wildlife and Habitat – Waste Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent human-carnivore interactions.
Term or Condition:	<p>The Proponent shall ensure that its Environment Protection Plan incorporates waste management provisions to prevent carnivores from being attracted to the Project site(s). Consideration must be given to the following measures:</p> <ul style="list-style-type: none"> a. Installation of an incinerator beside the kitchen that will help to keep the food waste management process simple and will minimize the opportunity for human error (i.e. storage of garbage outside, hauling in a truck (odours remain in truck), hauling some distance to a landfill site, incomplete combustion at landfill, fencing of landfill, etc.); and b. Installation of solid carnivore-proof skirting on all kitchen and

	accommodation buildings (i.e., heavy-duty steel mesh that would drop down from the edge of the buildings/trailers and buried about a half meter into the ground to prevent animals from digging under the skirting).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: The use of the phrase “consideration must be given” requires that if the Proponent chooses not to implement the suggested measures, the Proponent must provide an indication of the rationale for not implementing the suggested measure and for choosing an alternative measure.

Birds

Term and Condition No.	65
Category:	Birds – Awareness
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent disturbance to birds and bird habitat.
Term or Condition:	The Proponent shall ensure all employees working at project sites receive awareness training regarding the importance of avoiding known nests and nesting areas and large concentrations of foraging and moulting birds.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	66
Category:	Birds – Species at Risk
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to sensitive bird species.
Term or Condition:	If Species at Risk or their nests and eggs are encountered during Project activities or monitoring programs, the primary mitigation measure must be avoidance. The Proponent shall establish clear zones of avoidance on the basis of the species-specific nest setback distances outlined in the Terrestrial Environment Management and Monitoring Plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	67
Category:	Birds – Species at Risk
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to sensitive bird species.

Term or Condition:	The Proponent shall ensure that the mitigation and monitoring strategies developed for Species at Risk are updated as necessary to maintain consistency with any applicable status reports, recovery strategies, action plans and management plans that may become available during the duration of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	68
Category:	Birds – Project Infrastructure
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent potential injuries to birds.
Term or Condition:	The Proponent shall ensure flashing red, red strobe or white strobe lights and guy-wire deterrents are used on communications towers established for the Project. Consideration should also be given to reducing lighting when possible in areas where it may serve as an attractant to birds or other wildlife.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

***Commentary:** The first sentence in the above term and condition refers to the use of appropriate lighting to make communications and guy-wires visible to birds to ensure birds can avoid such obstacles, while the second sentence indicates that in other circumstances, where lighting of project areas could serve as an attractant to birds or other wildlife, consideration should be given to reducing such lighting.*

Term and Condition No.	69
Category:	Birds – Construction/Clearing Activities
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent nesting by birds in active Project areas.
Term or Condition:	Prior to bird migrations and commencement of nesting, the Proponent shall identify and install nesting deterrents (e.g. flagging) to discourage birds from nesting in areas likely to be disturbed by construction/clearing activities taking place during the nesting season.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	70
Category:	Birds – Construction/Clearing Activities
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to birds and nesting areas.
Term or Condition:	The Proponent shall protect any nests found (or indicated nests) with a

	buffer zone determined by the setback distances outlined in its Terrestrial Environment Mitigation and Monitoring Plan, until the young have fledged. If it is determined that observance of these setbacks is not feasible, the Proponent will develop nest-specific guidelines and procedures to ensure bird's nests and their young are protected.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	71
Category:	Birds – Flight Altitude Requirements
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate aircraft disturbance to birds.
Term or Condition:	<p>Subject to safety requirements, the Proponent shall require all project related aircraft to maintain a cruising altitude of at least:</p> <ul style="list-style-type: none"> a. 650 m during point to point travel when in areas likely to have migratory birds b. 1100 m vertical and 1500 m horizontal distance from observed concentrations of migratory birds c. 1100 m over the area identified as a key site for moulting snow geese during the moulting period (July-August), and if maintaining this altitude is not possible, maintain a lateral distance of at least at least 1500 m from the boundary of this site.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As noted under the Commentary in Term and Condition #59 the Terrestrial Environment Working Group may provide the Proponent with additional direction regarding minimum flight altitude requirements that may differ from these requirements, but unless the Terrestrial Environment Working Group provides additional direction, the minimum flight altitudes set out above will govern with respect to migratory birds specifically.

Term and Condition No.	72
Category:	Birds – Flight Altitude Requirements
Responsible Parties:	The Proponent, Transport Canada
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate aircraft disturbance to birds.
Term or Condition:	The Proponent shall ensure that pilots are informed of minimum cruising altitude guidelines and that a daily log or record of flight paths and cruising altitudes of aircraft within all Project Areas is maintained and made available for regulatory authorities such as Transport Canada to monitor adherence and to follow up on complaints.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	73
Category:	Birds – Monitoring
Responsible Parties:	The Proponent, Qikiqtani Inuit Organization, TEWG, MEWG
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To develop appropriate mitigation and monitoring of impacts to birds.
Term or Condition:	The Proponent shall develop detailed and robust mitigation and monitoring plans for migratory birds, reflecting input from relevant agencies, the Qikiqtani Inuit Organization and communities as part of the Terrestrial Environment Working Group and to the extent applicable the Marine Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	74
Category:	Birds – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To develop appropriate mitigation and monitoring of impacts to birds.
Term or Condition:	The Proponent shall continue to develop and update relevant monitoring and management plans for migratory birds under the Proponent's Environmental Management System, Terrestrial Environment Mitigation and Monitoring Plan prior to construction. The key indicators for follow up monitoring under this plan will include: peregrine falcon, gyrfalcon, common and king eider, red knot, seabird migration and wintering, and songbird and shorebird diversity.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	75
Category:	Birds – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assess the extent of terrestrial habitat loss.
Term or Condition:	The Proponent's monitoring program shall assess and report, on annual basis, the extent of terrestrial habitat loss due to the Project to verify impact predictions and provide updated estimates of the total project footprint.
Reporting Requirements:	To be provided within the Annual Report to the NIRB.

Marine Environment, Marine Water/Ice and Sediment Quality

Term and Condition No.	76
Category:	Marine Environment – General
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate potential impacts to the marine environment.
Term or Condition:	The Proponent shall develop a comprehensive Environmental Effects Monitoring Program to address concerns and identify potential impacts of the Project on the marine environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	77
Category:	Marine Environment – Working Group
Responsible Parties:	The Proponent, Environment Canada, Fisheries and Oceans Canada, the Government of Nunavut, the Qikiqtani Inuit Association and interested parties.
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	The MEWG will consult with, and provide advice and recommendations to the Proponent in connection with mitigation measures for the protection of the marine environment, monitoring of effects on the marine environment and the consideration of adaptive management plans. The role of the MEWG is not intended to either duplicate or to affect the exercise of regulatory authority by appropriate government agencies and departments.
Term or Condition:	A Marine Environment Working Group ("MEWG") shall be established to serve as an advisory group in connection with mitigation measures for the protection of the marine environment, and in connection with the Project Environmental Effects Monitoring program, as it pertains to the marine environment. Membership on the MEWG will include the Proponent, Environment Canada, Fisheries and Oceans Canada, Parks Canada, the Government of Nunavut, the Qikiqtani Inuit Association, the Mittimatilik Hunters and Trappers Organization, and other agencies or interested parties as determined to be appropriate by these key members. Makivik Corporation shall also be entitled to membership on the MEWG at its election. The MEWG members may consider the draft terms of reference for the MEWG filed in the Final Hearing, but they are not bound by them.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	78
Category:	Marine Environment – Ice Breaking and Shipping
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To obtain accurate and current ice information.
Term or Condition:	The Proponent shall update the baseline information for landfast ice using a long-term dataset (28 years), and with information on inter-annual variation. The analysis for pack and landfast ice shall be updated annually using annual sea ice data (floe size, cover, concentration) and synthesized and reported in the most appropriate management plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

***Commentary:** The annual update for pack and landfast ice includes not only identification of naturally-occurring effects, but also must include information on effects on floe size, cover and concentration of pack and landfast ice that may be attributed to icebreaking activities.*

Term and Condition No.	79
Category:	Marine Environment – Ice Breaking and Shipping
Responsible Parties:	The Proponent, Canadian Hydrographic Services
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assist in the development of nautical charts for Canadian waters.
Term or Condition:	The Proponent shall provide the Canadian Hydrographic Services with bathymetric data and other relevant information collected in support of Project shipping where possible, to assist in the development of nautical charts for Canadian waters.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	80
Category:	Marine Environment – Ice Breaking and Shipping
Responsible Parties:	The Proponent, Canadian Hydrographic Services
Project Phase:	Construction
Objective:	To identify areas of risk along the shipping route.
Term or Condition:	Prior to commercial shipping of iron ore, the Proponent shall conduct a detailed risk assessment for Project-related shipping accidents, noting areas along the ship tracks where vessels may be particularly vulnerable to environmental conditions such as sea ice, and any seasonal differences in risk. This assessment shall inform mitigation and adaptive management plans.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	81
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate potential shoreline effects from shipping.
Term or Condition:	The Proponent shall reassess the potential for ship wake impacts to cause coastal change following any further changes to the proposed shipping routes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	82
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To mitigate potential shoreline effects from shipping.
Term or Condition:	The Proponent is strongly encouraged to have its ore carriers subjected to sea trials to measure wake characteristics at various vessel speeds and distances from the vessel.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	83
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To monitor relative sea level and storm surges.
Term or Condition:	The Proponent shall install tidal gauges at the Steensby Inlet Port and Milne Inlet Port sites to monitor relative sea level and storm surges.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: Note that the requirement for installation of tidal gauges may be subject to the Navigation Protection Program.

Term and Condition No.	83(a)
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To identify potential for and conduct monitoring to identify effects of sediment redistribution associated with construction and operation of the Milne Port.
Term or Condition:	The Proponent shall conduct hydrodynamic modelling in the Milne Inlet Port area to determine the potential impacts arising from disturbance to

	sediments including re-suspension and subsequent transport and deposition of sediment. The modelling results shall be used to update the marine water and sediment quality monitoring and mitigation program to include activities associated with the construction and operation of the Milne Inlet Port. The monitoring program shall include an ongoing assessment of the potential introduction of metals that bio-accumulate in the marine food chain.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	84
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent sediment redistribution along the shipping route.
Term or Condition:	The Proponent shall update its sediment redistribution modeling once ship design has been completed and sampling should be undertaken to validate the model and to inform sampling sites and the monitoring plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	85
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent sediment redistribution along the shipping route.
Term or Condition:	The Proponent shall develop a monitoring plan to verify its impact predictions associated with sediment redistribution resulting from propeller wash in shallow water locations along the shipping route. If monitoring detects negative impacts from sediment redistribution, additional mitigation measures will need to be developed and implemented.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	86
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To update ballast water discharge impact predictions.
Term or Condition:	Prior to commercial shipping of iron ore, the Proponent shall use more detailed bathymetry collected from Steensby Inlet and Milne Inlet to model the anticipated ballast water discharges from ore carriers. The results from this modeling shall be used to update ballast water discharge impact predictions and should account for density dependent flow and annual timescales over the project life. Additional sampling should also be undertaken to validate the model and to inform sampling sites and the

	monitoring plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	87
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent invasive species introductions resulting from Project shipping.
Term or Condition:	The Proponent shall develop a detailed monitoring program at a number of sites over the long term to evaluate changes to marine habitat and organisms and to monitor for non-native introductions resulting from Project-related shipping. This program needs to be able to detect changes that may have biological consequences and should be initiated several years prior to any ballast water discharge into Steensby Inlet and Milne Inlet to collect sufficient baseline data and should continue over the life of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	88
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent invasive species introductions resulting from Project shipping.
Term or Condition:	<p>Prior to commercial shipping of iron ore and in conjunction with the Marine Environment Working Group, the Proponent shall provide an updated risk analysis regarding ballast water discharge to assess the adequacy of treatment and implications on the receiving environment. This risk analysis shall consider, but not be limited to:</p> <ul style="list-style-type: none"> a. Invasive species; b. Seasonal oceanography; c. Ballast water quality and quantity; d. Receiving water quality; e. Residual physical, chemical, and/or biological effects; and f. Any risk assessment analysis regarding ballast water exchange and treatment efficacy in arctic waters.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	89
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring

Objective:	To prevent impacts to marine water quality resulting from ballast water exchange.
Term or Condition:	The Proponent shall develop and implement an effective ballast water management program that may include the treatment and monitoring of ballast water discharges in a manner consistent with applicable regulations and/or exceed those regulations if they are determined to be ineffective for providing the desired and predicted results. The ballast water management program shall include, without limitation, a provision that requires ship owners to test their ballast water to confirm that it meets the salinity requirements of the applicable regulations prior to discharge at the Milne Port, and a requirement noting that the Proponent, in choosing shipping contractors will, whenever feasible, give preference to contractors that use ballast water treatment in addition to ballast water exchange.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	90
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to marine water quality resulting from ballast water exchange.
Term or Condition:	The Proponent shall incorporate into its Shipping and Marine Mammals Management Plan provisions to achieve compliance with the requirements under the International Convention for the Control and Management of Ship's Ballast Water and Sediment (2004) or its replacement and as implemented by the <i>Canadian Ballast Water and Control Regulations</i> as may be amended from time to time.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	91
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to marine water quality in Steensby Inlet and Milne Inlet.
Term or Condition:	The Proponent shall develop a detailed monitoring plan for Steensby Inlet and Milne Inlet for fouling that complies with all applicable regulatory requirements and guidelines as issued by Transport Canada, and includes sampling areas on ships where antifouling treatment is not applied such as the areas where non-native species are most likely to occur.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: The term “fouling” as used in the context of this term and condition refers specifically to hull fouling on ships.

Term and Condition No.	92
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure adequate spill response capacity.
Term or Condition:	The Proponent shall ensure that it maintains the necessary equipment and trained personnel to respond to all sizes of potential spills associated with the Project in a self sufficient manner.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	93
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment at Steensby Inlet.
Term or Condition:	Prior to construction, based on vessel selection and if so required, the Proponent shall reassess the risk analysis of using vessel-based fuel storage, including the potential environmental impacts of containment failure under a range of winter ice conditions, how a spill might spread and the impact of fuel if it does not volatilize to the atmosphere.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	94
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To promote public awareness of Project activities.
Term or Condition:	The Proponent shall consult directly with affected communities regarding its plans for over-wintering of fuel in Steensby Inlet, with discussion topics to include descriptions of the duration of proposed activities, vessel type, spill preparedness and emergency response protocols, environmental impact predictions and answers to community member questions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	95
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent, Transport Canada
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment at Steensby Inlet.
Term or Condition:	The Proponent shall meet or exceed all regulatory regulations and requirements as apply to the practice of overwintering a fuel vessel at Steensby Inlet, with reporting to the NIRB and Transport Canada.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	96
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To ensure adequate oversight of Project activities is occurring.
Term or Condition:	The Proponent will update the NIRB on the results of all compliance monitoring and site inspections undertaken by government agencies for the overwintering of a fuel vessel in Steensby Inlet.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	97
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment along the shipping route.
Term or Condition:	<p>Prior to the commercial shipping of iron ore, the Proponent shall conduct fuel spill dispersion modeling that will, at a minimum, consider:</p> <ul style="list-style-type: none"> a. Modeling of oil spills for both the Northern and Southern Shipping Routes, in representative locations, identified by the Proponent, in consultation with the Marine Environment Working Group along both Shipping Routes, and including : <ul style="list-style-type: none"> i. Pinch points; ii. The approaches into Steensby Inlet and Milne Inlet; iii. Shallow water and shorelines; and, iv. Areas that have been identified as having high flows and/or high concentrations of marine mammals, marine fish or seabirds. b. Open water and, where applicable, ice-covered conditions; c. Spill volumes up to and including loss of a full tanker cargo; and, d. Differences in the quantity and properties of each type of bulk fuel transported by vessels when they are at, or in transit to, the ports at Steensby Inlet and Milne Inlet.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	98
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment along the shipping route.
Term or Condition:	The Proponent shall incorporate the results of revised fuel spill dispersion modeling into its impact predictions for the marine environment and its spill response and emergency preparedness plans.

Reporting Requirements:	To be developed following approval of the Project by the Minister.
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Marine Wildlife and Marine Habitat

Term and Condition No.	99
Category:	Marine Environment – Supplemental Baseline Assessments
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction
Objective:	To supplement baseline information and improve predictions for potential impacts to marine wildlife.
Term or Condition:	<p>The Proponent, working with the Marine Environment Working Group, shall consider and identify priorities for conducting the following supplemental baseline assessments:</p> <ul style="list-style-type: none"> a. Establish shipping season, inter-annual baseline in Steensby Inlet and Milne Inlet that enables effective monitoring of physical and chemical effects of ballast water releases, sewage outfall, and bottom scour by ship props, particularly downslope and downstream from the docks. This shall include the selection and identification of physical, chemical, and biological community/indicator components. The biological indicators shall include both pelagic and benthic species but with emphasis on relatively sedentary benthic species (e.g., sculpins). b. The collection of additional baseline data: <ul style="list-style-type: none"> i. in Steensby Inlet on walrus, beluga, bearded seal anadromous Arctic Char abundance, distribution ecology and habitat use; and ii. In Milne Inlet on narwhal, bowhead and anadromous Arctic Char abundance, distribution ecology and habitat use. c. Enhance baseline data on marine wildlife (fish, invertebrates, birds, mammals, etc.) and to provide more details on species abundance and distribution found in the Project area. This shall include, but not be limited to the following: <ul style="list-style-type: none"> iii. Aerial surveys for basking ringed seals throughout the landfast ice of Steensby Inlet and at an appropriate control location; iv. Shore-based observations of pre-Project narwhal and bowhead whale behavior in Milne Inlet that continues at an appropriate frequency throughout the Early Revenue Phase and for not less than three consecutive years. <p>Enhance the baseline for affected freshwater systems, which includes control sites to detect Project-related changes before they cause significant</p>

	harm.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	100
Category:	Marine Environment – Supplemental Baseline Assessments
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction
Objective:	To supplement baseline information and improve predictions for potential impacts to marine wildlife.
Term or Condition:	The Proponent shall update its Shipping and Marine Wildlife Management Plan, to include avoidance of polynyas and mitigation measures designed for potential fuel spills along the shipping lane during the winter months, with consideration for the impact of spilled fuel on marine mammals when they might be less mobile or able to avoid contact with spilt fuel or fumes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	101
Category:	Marine Environment – Monitoring
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To monitor for potential impacts to marine wildlife and marine habitat.
Term or Condition:	<p>The Proponent shall incorporate into the appropriate monitoring plans the following items:</p> <ol style="list-style-type: none"> A monitoring program that focuses on walrus use of Steensby Inlet and their reaction to disturbance from construction activities, aircraft, and vessels; Efforts to involve Inuit in monitoring studies at all levels; Monitoring protocols that are responsive to Inuit concerns; Marine monitoring protocols are to consider the use of additional detecting devices to ensure adequate monitoring through changing seasonal conditions and daylight; Schedule for periodic aerial surveys as recommended by the Marine Environment Working Group; Periodic aerial surveys for basking ringed seals throughout the landfast ice of Steensby Inlet, and a suitable control location. Surveys shall be conducted at an appropriate frequency to detect change inter-annual variability; Shore-based observations of pre-Project narwhal behavior in Milne Inlet, that continues at an appropriate frequency throughout the Early Revenue Phase (not less than three years); Conduct landfast ice monitoring for the duration of the Project Operations phase, which will include: <ol style="list-style-type: none"> The number of ship transits that are able to use the same track; and, The area of landfast ice disrupted annually by ship traffic;

	and iii. Monitoring strategy focused on assessing and mitigating interaction between humans and wildlife at the port site(s).
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	102
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To promote public awareness of Project shipping activities for the general public.
Term or Condition:	The Proponent shall ensure that routing of project vessels is tracked and recorded for both the southern and northern shipping routes, with data made accessible in real time to communities in Nunavut and Nunavik.
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

***Commentary:** Recognizing that at the time of issuance of Amendment No. 1, the Board was advised that the technology to provide “real time” data is only available at the Port sites, the Proponent is required to provide real time data where technologically feasible and to make best efforts to provide information in as timely a manner as possible where reporting real time data is not yet feasible. As real time data reporting become feasible in areas beyond the Port sites, the Proponent is expected to update its reporting practices to provide real time data in compliance with this Condition.*

Term and Condition No.	103
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor effectiveness of mitigation of shipping impacts to marine wildlife.
Term or Condition:	The Proponent shall report annually to the NIRB regarding project-related ship track and sea ice information, including: <ul style="list-style-type: none"> a. A record of all ship tracks taken along both shipping routes covering the entire shipping season; b. When employing ice-breaking, an overlay of ship tracks onto ice imagery to determine whether ships are effectively avoiding shore leads and polynyas; c. A comparison of recorded ship tracks to the expected nominal shipping route, and probable (if any) extent of year-round shipping during periods of ice cover and open-water; d. An assessment of the level of adherence to the nominal shipping route and the spatial extent of the shipping zone of influence; and e. When employing ice-breaking, marine bird and mammal species and number of individuals attracted to ship tracks in ice.
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	104
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To prevent impacts to marine wildlife from Project shipping activities.
Term or Condition:	<p>Subject to safety considerations and the potential for conditions as determined by the crew of transiting vessels, to result in route deviations,</p> <ul style="list-style-type: none"> a. the Proponent shall require, for shipping to/from Steensby Port, project vessels to maintain a route to the south of Mill Island to prevent disturbance to walrus and walrus habitat on the northern shore of Mill Island. Where project vessels are required to transit to the north of Mill Island owing to environmental or other conditions, an incident report is to be provided to the Marine Environment Working Group and the NIRB within 30 days, noting all wildlife sightings and interactions as recorded by shipboard monitors. b. The Proponent shall summarize all incidences of significant deviations from the nominal shipping routes for traffic to/from Milne Port and Steensby Port as presented in the FEIS and FEIS Addendum to the NIRB annually, with corresponding discussion regarding justification for deviations and any observed environmental impacts.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	105
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine wildlife from Project shipping activities.
Term or Condition:	<p>The Proponent shall ensure that measures to reduce the potential for interaction with marine mammals, particularly in Hudson Strait and Milne Inlet, are identified and implemented prior to commencement of shipping operations. These measures could include, but are not limited to:</p> <ul style="list-style-type: none"> a. Changes in the frequency and timing (including periodic suspensions) of shipping during winter months in Hudson Strait and during the open water season in Milne Inlet, i.e., when interactions with marine mammals are likely to be the most problematic; b. Reduced shipping speeds where ship-marine mammal interactions are most likely; and c. Identification of alternate shipping routes through Hudson Strait for use when conflicts between the proposed routes and marine mammals could arise. Repeated winter aerial survey results showing marine mammal distribution and densities in Hudson Strait would greatly assist in this task.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: Unless otherwise stated, the term “marine mammals” as used throughout the Project Certificate includes polar bears.

Term and Condition No.	106
Category:	Marine Environment – Shipboard Observers
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure that interactions with marine mammals and Project shipping activities are effectively monitored.
Term or Condition:	The Proponent shall ensure that shipboard observers are employed during seasons where shipping occurs and provided with the means to effectively carry out assigned duties. The role of shipboard observers in shipping operations should be taken into consideration during the design of any ore carriers purpose-built for the Project, with climate controlled stations and shipboard lighting incorporated to permit visual sightings by shipboard observers during all seasons and conditions. Any shipboard lighting incorporated should be in accordance with the <i>Canada Shipping Act, 2001's Collision Regulations</i> , and should not interfere with safe navigation of the vessel.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	107
Category:	Marine Environment – Shipboard Observers
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To determine the presence of, and ensure that interactions with marine mammals, seabirds and seaducks are effectively monitored for, along the northern and southern shipping routes, as applicable.
Term or Condition:	The Proponent shall revise the proposed “surveillance monitoring” to improve the likelihood of detecting strong marine mammal, seabird or seaduck responses occurring too far ahead of the ship to be detectable by observers aboard the ore carriers. A baseline study early in the shipping operations could employ additional surveillance to detect potential changes in distribution patterns and behavior. At an ambitious scope, this might be achieved using unmanned aircraft flown ahead of ships, or over known areas of importance for seabirds or haul-out sites in the case of walrus, in accordance with the requirements of their Special Flight Operations Certificate.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	108
Category:	Marine Environment – Shipboard Observers
Responsible Parties:	The Proponent

Project Phase:	Construction, Operations
Objective:	To ensure that interactions with marine mammals, seabirds, and seabirds are effectively monitored for along the southern and northern shipping routes, as applicable.
Term or Condition:	The Proponent shall ensure that data produced by the surveillance monitoring program is analysed rigorously by experienced analysts (in addition to being discussed as proposed in the FEIS) to maximize their effectiveness in providing baseline information, and for detecting potential effects of the project on marine mammals, seabirds and seabirds in the Regional Study Area. It is expected that data from the long-term monitoring program be treated with the same rigor.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	109
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	The Proponent shall conduct a monitoring program to confirm the predictions in the FEIS with respect to disturbance effects from ships noise on the distribution and occurrence of marine mammals. The survey shall be designed to address effects during the shipping seasons, and include locations in Hudson Strait and Foxe Basin, Milne Inlet, Eclipse Sound and Pond Inlet. The survey shall continue over a sufficiently lengthy period to determine the extent to which habituation occurs for narwhal, beluga, bowhead and walrus.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	110
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	The Proponent shall immediately develop a monitoring protocol that includes, but is not limited to, acoustical monitoring, to facilitate assessment of the potential short term, long term, and cumulative effects of vessel noise on marine mammals and marine mammal populations. The Proponent is expected to work with the Marine Environment Working Group to determine appropriate early warning indicator(s) that will ensure rapid identification of negative impacts along the southern and northern shipping routes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	111
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	<p>The Proponent shall develop clear thresholds for determining if negative impacts as a result of vessel noise are occurring. Mitigation and adaptive management practices shall be developed to restrict negative impacts as a result of vessel noise. This shall include, but not be limited to:</p> <ul style="list-style-type: none"> a. Identifications of zones where cumulative noise could be mitigated due to biophysical features (e.g., water depth, distance from migration routes, distance from overwintering areas etc.); and b. Vessel transit planning, for all seasons, to determine the degree to which cumulative sound impacts can be mitigated through the seasonal use of different zones.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	112
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	<p>Prior to commercial shipping of iron ore, the Proponent, in conjunction with the Marine Environment Working Group, shall develop a monitoring protocol that includes, but is not limited to, acoustical monitoring that provides an assessment of the negative effects (short and long term cumulative) of vessel noise on marine mammals. Monitoring protocols will need to carefully consider the early warning indicator(s) that will be best examined to ensure rapid identification of negative impacts. Thresholds shall be developed to determine if negative impacts as a result of vessel noise are occurring. Mitigation and adaptive management practices shall be developed to restrict negative impacts as a result of vessel noise. This shall include, but not be limited to:</p> <ul style="list-style-type: none"> a. Identification of zones where noise could be mitigated due to biophysical features (e.g., water depth, distance from migration routes, distance from overwintering areas etc.); b. Vessel transit planning, for all seasons. c. A monitoring and mitigation plan is to be developed, and approved by Fisheries and Oceans Canada prior to the commencement of blasting in marine areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	113
Category:	Marine Environment – Arctic Char
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine fish in Steensby Inlet and Milne Inlet
Term or Condition:	The Proponent shall conduct monitoring of marine fish and fish habitat, which includes but is not limited to, monitoring for Arctic Char stock size and health condition in Steensby Inlet and Milne Inlet, as recommended by the Marine Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	114
Category:	Marine Environment – Arctic Char
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine fish in Steensby Inlet and Milne Inlet.
Term or Condition:	In the event of the development of a commercial fishery in the Steensby Inlet area or Milne Inlet-Eclipse Sound areas, the Proponent, in conjunction with the Marine Environment Working Group, shall update its monitoring program for marine fish and fish habitat to ensure that the ability to identify Arctic Char stock(s) potentially affected by Project activities and monitor for changes in stock size and structure of affected stocks and fish health (condition, taste) is maintained to address any additional monitoring issues identified by the MEWG relating to the commercial fishery.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	115
Category:	Marine Environment – Arctic Char
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine fish in Steensby Inlet and Milne Inlet.
Term or Condition:	The Proponent is encouraged to continue to explore off-setting options in both the freshwater and marine environment to offset the serious harm to fish which will result from the construction and infrastructure associated with the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: The term “serious harm” is as defined by applicable Federal fisheries legislation and interpreted by Fisheries and Oceans Canada from time to time.

Term and Condition No.	116
Category:	Marine Environment – Blasting
Responsible Parties:	The Proponent, Fisheries and Oceans Canada
Project Phase:	Construction
Objective:	To prevent impacts to marine fish and fish habitat from explosives.
Term or Condition:	Prior to construction, the Proponent shall develop mitigation measures to minimize the effects of blasting on marine fish and fish habitat, marine water quality and wildlife that includes, but is not limited to compliance with the Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (Wright and Hopky, 1998) as modified by Fisheries and Oceans Canada for use in the North and as revised from time to time.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	117
Category:	Marine Environment – Blasting
Responsible Parties:	The Proponent, Fisheries and Oceans Canada
Project Phase:	Construction
Objective:	To prevent impacts to marine fish and fish habitat from explosives.
Term or Condition:	The Proponent shall ensure that blasting in, and near, marine water shall only occur during periods of open water. Blasting in, and near, fish-bearing freshwaters shall, to the greatest degree possible, only occur in open water. If blasting is required during ice-covered periods, it must meet requirements established by Fisheries and Oceans Canada.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	118
Category:	Marine Environment – Blasting
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to marine fish and fish habitat from explosives.
Term or Condition:	The Proponent shall incorporate into the appropriate mitigation plan prior to construction, thresholds for the use of specific mitigation measures meant to prevent or limit marine wildlife disturbance, such as bubble curtains for blasting, and nitrate removal.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As expressly noted in the Minister's letter of April 28, 2014, this term and condition applies equally to all aspects of the Mary River Project, including the Early Revenue Phase.

Term and Condition No.	119
Category:	Marine Environment – Ringed Seals
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction
Objective:	To prevent impacts to ringed seals from icebreaking associated with Project shipping.
Term or Condition:	The Proponent shall, in conjunction with the Marine Environment Working Group, monitor ringed seal birth lair abundance and distribution for at least two years prior to the start of icebreaking to develop a baseline, with continued monitoring over the life of the project as necessary to test the accuracy of the impact predictions and determine if mitigation is needed. Monitoring shall also include a control site outside of the Project's zone of influence.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	120
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals associated with Project shipping.
Term or Condition:	The Proponent shall ensure that, subject to vessel and human safety considerations, all project shipping adhere to the following mitigation procedures while in the vicinity of marine mammals: <ul style="list-style-type: none"> a. Wildlife will be given right of way; b. Ships will when possible, maintain a straight course and constant speed, avoiding erratic behavior; and c. When marine mammals appear to be trapped or disturbed by vessel movements, the vessel will implement appropriate measures to mitigate disturbance, including stoppage of movement until wildlife have moved away from the immediate area.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As noted previously, unless otherwise stated, the term “marine mammals” as used throughout the Project Certificate includes polar bears.

Term and Condition No.	121
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent, Fisheries and Oceans Canada, Environment Canada
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and seabird colonies associated with Project shipping.
Term or Condition:	The Proponent shall immediately report any accidental contact by project vessels with marine mammals or seabird colonies to Fisheries and Oceans

	<p>Canada and Environment Canada respectively, by notifying the appropriate regional office of the:</p> <ul style="list-style-type: none"> a. Date, time and location of the incident; b. Species of marine mammal or seabird involved; c. Circumstances of the incident; d. Weather and sea conditions at the time; e. Observed state of the marine mammal or sea bird colony after the incident; and, f. Direction of travel of the marine mammal after the incident, to the extent that it can be determined.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	122
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and seabird colonies associated with Project shipping.
Term or Condition:	The Proponent shall summarize and report annually to the NIRB regarding accidental contact by project vessels with marine mammals or seabird colonies through the applicable monitoring report.
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	123
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and seabird colonies associated with Project shipping.
Term or Condition:	The Proponent shall provide sufficient marine mammal observer coverage on project vessels to ensure that collisions with marine mammals and seabird colonies are observed and reported through the life of the Project. The marine wildlife observer protocol shall include, but not be limited to, protocols for marine mammals, seabirds, and environmental conditions and immediate reporting of significant observations to the ship masters of other vessels along the shipping route, as part of the adaptive management program to address any items that require immediate action.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	124
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance,

	Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and marine fish populations from increased harvesting pressures in Project areas.
Term or Condition:	The Proponent shall prohibit project employees from recreational boating, fishing, and harvesting of marine wildlife in project areas, including Steensby Inlet and Milne Inlet. The Proponent is not directed to interfere with harvesting by the public in or near project areas, however, enforcement of a general prohibition on harvesting in project areas by project employees during periods of active employment (i.e. while on site and between work shifts) is required.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	125
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assess acceptability of acoustic deterrent devices for the general public.
Term or Condition:	Prior to use of acoustic deterrent devices, the Proponent shall carry out consultations with communities along the shipping routes and nearest to Steensby Inlet and Milne Inlet ports to assess the acceptability of these devices. Feedback received from community consultations shall be incorporated into the appropriate mitigation plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	125 (a)
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure public acceptability of project vessel anchor sites and reduce potential conflicts between project marine shipping and local harvesting.
Term or Condition:	The Proponent shall consult with potentially-affected communities and groups, particularly Hunters' and Trappers' Organizations regarding the identification of project vessel anchor sites and potential areas of temporary refuge for project vessels along the shipping routes within the Nunavut Settlement Area. Feedback received from community consultations shall be incorporated into the most appropriate mitigation or management plans.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	126
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent

Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To incorporate local input into monitoring data collection.
Term or Condition:	The Proponent shall design monitoring programs to ensure that local users of the marine area in communities along the shipping route have opportunity to be engaged throughout the life of the Project in assisting with monitoring and evaluating potential project-induced impacts and changes in marine mammal distributions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	127
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To promote public awareness and engagement with Project shipping activities.
Term or Condition:	The Proponent shall ensure that communities and groups in Nunavik are kept informed of project shipping activities and are provided with opportunity to participate in the continued development and refinement of shipping related monitoring and mitigation plans.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	128
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure habitat compensation is acceptable to local communities.
Term or Condition:	The Proponent shall consult with local communities as fish habitat off-setting options are being considered and demonstrate its incorporation of input received into the design of the Fish Habitat Off-Setting Plan required to offset the Harmful Alteration, Disruption or Destruction of Fish and Fish Habitat (HADD).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

4.3 Socio-Economic Terms and Conditions

Population Demographics

Term and Condition No.	129
Category:	Population Demographics – Qikiqtaaluk Socio-Economic Monitoring Committee
Responsible Parties:	The Proponent, members of the QSEMC

Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Description of the general monitoring framework to be developed in consultation with the Qikiqtaaluk Socio-Economic Monitoring Committee.
Term or Condition:	The Proponent is strongly encouraged to engage in the work of the Qikiqtaaluk Socio-Economic Monitoring Committee along with other agencies and affected communities, and it should endeavour to identify areas of mutual interest and priorities for inclusion into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities, and the North Baffin region as a whole.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	130
Category:	Population Demographics – Project-specific monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Recognizing that some Project-specific socio-economic monitoring initiatives may be best addressed in smaller more focused working groups, this is encouraged where possible.
Term or Condition:	The Proponent should consider establishing and coordinating with smaller socio-economic working groups to meet Project specific monitoring requirements throughout the life of the Project.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	131
Category:	Population Demographics – Monitoring demographic changes
Responsible Parties:	The Proponent, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor demographic changes affecting the North Baffin communities and the territory as a whole in order to understand changes and to evaluate the Proponent's predictions as related to population demographics.
Term or Condition:	The Qikiqtaaluk Socio-Economic Monitoring Committee is encouraged to engage in the monitoring of demographic changes including the movement of people into and out of the North Baffin communities and the territory as a whole. This information may be used in conjunction with monitoring data obtained by the Proponent from recent hires and/or out-going employees in order to assess the potential effect the Project has on migration.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	132
Category:	Population Demographics – Training programs
Responsible Parties:	The Proponent, North Baffin Hamlets, Municipal Training Organization, Government of Nunavut

Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To develop training programs in ways which contribute to limiting the potential for migration to occur as North Baffin residents seek training and employment opportunities in the larger centre of Iqaluit.
Term or Condition:	The Proponent is encouraged to partner with other agencies such as Hamlet organizations in the North Baffin region, the Municipal Training Organization, and the Government of Nunavut in order to adapt pre-existing, or to develop new programs which encourage Inuit to continue living in their home communities while seeking ongoing and progressive training and development. Programs may include driver training programs offered within Hamlets, providing upgraded equipment to communities for use in municipal works, providing incentives for small businesses to remain operating out of their community of origin, or supplementing existing recreational facilities and programming in North Baffin communities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	133
Category:	Population Demographics – Monitoring demographic changes
Responsible Parties:	The Proponent, members of QSEMC, Government of Nunavut, Nunavut Housing Corporation
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Training programs may be developed with the goal of limiting the potential for migration to occur as North Baffin residents may choose to seek employment and therefore move from smaller North Baffin communities to the larger centre of Iqaluit.
Term or Condition:	The Proponent is encouraged to work with the Qikiqtaaluk Socio-Economic Monitoring Committee and in collaboration with the Government of Nunavut's Department of Health and Social Services, the Nunavut Housing Corporation and other relevant stakeholders, design and implement a voluntary survey to be completed by its employees on an annual basis in order to identify changes of address, housing status (i.e. public/social, privately owned/rented, government, etc.), and migration intentions while respecting confidentiality of all persons involved. The survey should be designed in collaboration with the Government of Nunavut's Department of Health and Social Services, the Nunavut Housing Corporation and other relevant stakeholders. Non-confidential results of the survey are to be reported to the Government of Nunavut and the NIRB.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Commentary: Although the survey design and implementation should be undertaken in consultation with the Government of Nunavut, the responsibility for design and implementation of the survey remains with the Proponent.

Term and Condition No.	134
Category:	Population Demographics – Employee origin
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Project-specific information regarding employee origin is important to comparing predictions of labour availability and employment opportunities with actual levels of employment from various demographic segments over different geographic areas.
Term or Condition:	<p>The Proponent shall include with its annual reporting to the NIRB a summation of employee origin information as follows:</p> <ul style="list-style-type: none"> a. The number of Inuit and non-Inuit employees hired from each of the North Baffin communities, specifying the number from each; b. The number of Inuit and non-Inuit employees hired from each of the Kitikmeot and Kivalliq regions, specifying the number from each; c. The number of Inuit and non-Inuit employees hired from a southern location or other province/territory outside of Nunavut, specifying the locations and the number from each; and d. The number of non-Canadian foreign employees hired, specifying the locations and number from each foreign point of hire.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Education and Training

Term and Condition No.	135
Category:	Education and Training – Employee work/study programs
Responsible Parties:	The Proponent, Qikiqtani Inuit Association
Project Phase:	Construction and Operations
Objective:	Recognizing the 12-hour work days inherent with work at the Project site, it is not clear how employees would successfully engage in a work/study program offered by the Proponent.
Term or Condition:	The Proponent is encouraged to consider offering additional options for work/study programs available to Project employees (in addition to study programs at project sites that would be offered to employees when off shift).
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	136
Category:	Education and Training – Transferable skills and training
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Government of Nunavut, Municipal Training Organization
Project Phase:	Construction and Operations
Objective:	Offering training which results in certifications that are valid for employment at more than one site or in different fields provides an

	investment in the long-term employability of Nunavummiut.
Term or Condition:	The Proponent is encouraged to work with training organizations and/or government departments offering mine-related or other training in order to provide additional opportunities for employees to gain meaningful and transferable skills, credentials and certifications especially where such training of employees offered by the Proponent remains valid only at the Mary River Project sites.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	137
Category:	Education and Training – Transferable skills and training
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	Offering training which results in certifications that are valid for employment at more than one site or in different fields provides an investment in the long-term employability of Nunavummiut.
Term or Condition:	Prior to construction, the Proponent shall develop an easily referenced listing of formal certificates and licences that may be acquired via on-site training or training during employment at Mary River, such listing to indicate which of these certifications and licences would be transferable to a similar job site within Nunavut. This listing should be updated on an annual basis, and is to be provided to the NIRB upon completion and whenever it is revised.
Reporting Requirements:	The initial listing should be provided to the NIRB at least 60 days prior to the start of construction, an annually thereafter or as may otherwise be required.

Term and Condition No.	138
Category:	Education and Training – Inuit employee training
Responsible Parties:	The Proponent, Qikiqtani Inuit Association
Project Phase:	Construction
Objective:	Working together with the Qikiqtani Inuit Association to prepare effective training programs developed specifically for Inuit will assist in employee preparedness and may improve employee retention.
Term or Condition:	The Proponent is encouraged to work with the Qikiqtani Inuit Association to ensure the timely development of effective Inuit training and work-ready programs.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	139
Category:	Education and Training – Hiring southern Canadians and foreign employees
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	With the unknown availability of labour from the North Baffin region and

	Nunavut as a whole to provide employment to the Project, the need to employ southern Canadians or foreign workers may implicate the Proponent's on-site language, cross-cultural awareness, and other programming. Having information available regarding the sourcing of labour for the Project is important to ensuring the Proponent and others are prepared for any influx of southern or foreign employees.
Term or Condition:	Prior to commencing construction, the Proponent is requested to undertake and provide the results of a detailed labour market analysis which provides quantitative predictions of the number of employees that may reasonably need to be sourced from southern Canada and from foreign markets, identifying where applicable, the country of origin for the foreign labour. Within 90 days of the issuance of the Project Certificate, the Proponent is required to submit an updated Labour Market Analysis which considers requirements of the ERP as well as hiring points within Nunavut and outside of the North Baffin region and RSA.
Reporting Requirements:	To be developed following approval of the Project by the Minister

***Commentary:** As expressly noted in the Minister's letter of April 28, 2014, this term and condition applies equally to all aspects of the Mary River Project, including the Early Revenue Phase.*

Term and Condition No.	140
Category:	Education and Training – Survey of Nunavummiut employees
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	Monitoring the number of employees who leave previous employment in their home communities or who leave some type of formal education in pursuit of employment with the Project is important to evaluate predictions made and the potential impacts to North Baffin communities and education rates.
Term or Condition:	The Proponent is encouraged to survey Nunavummiut employees as they are hired and specifically note the level of education obtained and whether the incoming employee resigned from a previous job placement or educational institution in order to take up employment with the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	141
Category:	Education and Training – Training of Inuit
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To ensure that effective training is available in a timely manner.
Term or Condition:	The Proponent is encouraged to work with the Qikiqtani Inuit Association prior to construction in order to prioritize the provision of training of Inuit to serve as employees in monitoring or other such capacities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Livelihood and Employment

Term and Condition No.	142
Category:	Livelihood and Employment – Employee cohesion
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To promote cohesion between employees on site, and between employees and their families.
Term or Condition:	The Proponent is encouraged to address the potential direct and indirect effects that may result from Project employees' on-site use of various Inuktitut dialects as well as other spoken languages, specifically paying attention to the potential alienation of some employees that may occur as a result of language or other cultural barriers.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	143
Category:	Livelihood and Employment – Employee family contact
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To enable and foster connection and contact between employees and family members.
Term or Condition:	The Proponent is encouraged to consider the use of both existing and innovative technologies (e.g. community radio station call-in shows, cell phones, video-conferencing, Skype, etc.) as a way to ensure Project employees are able to keep in contact with family and friends and to ward off the potential for feelings of homesickness and distance to impact on employee retention and family stability.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	144
Category:	Livelihood and Employment – Requirements for employment
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To ensure that the prerequisites and requirements for employment are clear and well known in work readiness programs.
Term or Condition:	The Proponent is encouraged to make requirements for employment clear in its work-readiness and other public information programs and documentation, including but not limited to: education levels, criminal records checks, policies relating to drug and alcohol use and testing, and language abilities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	145
Category:	Livelihood and Employment – Barriers to employment for women
Responsible Parties:	The Proponent, Government of Nunavut, members of QSEMC
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor and understand the existence of barriers to employment for women specifically relating to childcare availability and costs.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut and the Qikiqtaaluk Socio-Economic Monitoring Committee to monitor the barriers to employment for women, specifically with respect to childcare availability and costs.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	146
Category:	Livelihood and Employment – Availability of childcare for Project employees
Responsible Parties:	Government of Nunavut and Qikitani Inuit Association
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To lessen the barriers to employment as relating to the availability of childcare.
Term or Condition:	The Government of Nunavut and the Qikiqtani Inuit Association are strongly encouraged to investigate the possibility for Project revenue streams to support initiatives or programs which offset or subsidize childcare for Project employees.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	147
Category:	Livelihood and Employment – Affordability of housing
Responsible Parties:	The Proponent, Government of Nunavut and Nunvut Housing Corporation
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To lessen the barriers to maintaining employment as relating to the availability and costs of housing.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut and the Nunavut Housing Corporation to investigate options and incentives which might enable and provide incentive for employees living in social housing to maintain employment as well as to negotiate for and obtain manageable rental rates.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Economic Development and Self-Reliance, and Contracting and Business Opportunities

Term and Condition No.	148
Category:	Economic Development and Self-Reliance, and Contracting and Business

	Opportunities – Food security
Responsible Parties:	The Proponent, Members of the QSEMC
Project Phase:	Construction and Operations
Objective:	To improve understanding of the interactions between the Project and Inuit harvesting and how this relates to food security for residents of the North Baffin.
Term or Condition:	The Proponent is encouraged to undertake collaborative monitoring in conjunction with the Qikiqtaaluk Socio-Economic Monitoring Committee's monitoring program which addresses Project harvesting interactions and food security and which includes broad indicators of dietary habits.
Reporting Requirements:	To be developed following approval of the Project by the Minister

***Commentary:** If available, the Proponent should also incorporate information regarding harvesting and food security indicators generated under the auspices of the Nunavut General Monitoring Plan.*

Term and Condition No.	149
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Impacts of temporary closure
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To further the understanding of how a temporary closure may impact on the well-being of the residents and businesses of the North Baffin region.
Term or Condition:	Prior to the commencement of operations, the Proponent is required to undertake an analysis of the risk of temporary mine closure, giving consideration to how communities in the North Baffin region may be affected by temporary and permanent closure of the mine, including economic, social and cultural effects and taking into consideration the potential drop in employment between the construction and operations phases of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	150
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Impacts to visitors of Sirmilik National Park
Responsible Parties:	The Proponent, Parks Canada
Project Phase:	Construction and Operations
Objective:	To limit potential of Project impacts upon visitors, researchers and/or beneficiary users of the Sirmilik National Park.
Term or Condition:	<p>The Proponent will ensure the following:</p> <ul style="list-style-type: none"> a. The Proponent will maintain, where possible, a minimum flying altitude of 2,000 feet over the park, except for approaches to land, take-off or for safety reasons. b. The Proponent will ensure that certification of noise compliance is current, where compliance is applicable.

	<p>c. For the purpose of briefing Park visitors, the Proponent will provide Parks Canada (1) prior to commencing the shipping season, with planned daily shipping schedules, and (2) annually, with air traffic information, and (3) to provide updates when significant variations from these are expected.</p> <p>d. The Proponent is strongly encouraged to provide due consideration to wilderness experience during its operations in the open water season, especially during the month of August which is typically a time of high use by sea kayakers.</p>
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	151
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Access to housing
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To investigate ways that economic development and self-reliance may improve access to housing by employees.
Term or Condition:	The Proponent is encouraged to investigate measures and programs designed to assist Project employees with homeownership or access to affordable housing options.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	152
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – IIBA contract requirements
Responsible Parties:	The Proponent, Qikiqtani Inuit Association
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To improve ability of small businesses to access Project contract and sub-contract opportunities.
Term or Condition:	The Qikiqtani Inuit Association is encouraged to provide the Board and the Qikiqtaaluk Socio-Economic Monitoring Committee with information regarding the effectiveness of any provisions within the Inuit Impact and Benefit Agreement which may require that larger contracts be broken down into smaller size in order that they are reasonably managed by smaller businesses in the North Baffin region, while respecting any confidential or privileged information.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Human Health and Well-Being

Term and Condition No.	153
Category:	Human Health and Well-Being – Employee and family health and well-being
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To provide adequate medical services on site, including those that contribute to the mental health and well-being of all employees.
Term or Condition:	The Proponent is encouraged to employ a mental health professional to provide counselling to Inuit and non-Inuit employees in order to positively contribute toward employee health and well-being.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	154
Category:	Human Health and Well-being – Indirect impacts to health and well-being
Responsible Parties:	The Proponent, Government of Nunavut, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To understand the indirect impacts of the Project upon health and well-being.
Term or Condition:	The Proponent shall work with the Government of Nunavut and the Qikiqtaaluk Socio-Economic Monitoring Committee to monitor potential indirect effects of the Project, including indicators such as the prevalence of substance abuse, gambling issues, family violence, marital problems, rates of sexually transmitted infections and other communicable diseases, rates of teenage pregnancy, high school completion rates, and others as deemed appropriate.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	155
Category:	Human Health and Well-being – Employee cohesion
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To encourage the on-site cohesion of employees through cultural-awareness and social programs.
Term or Condition:	The Proponent is strongly encouraged to provide the NIRB with an updated report on its development of mitigation measures and plans to deal with potential cultural conflicts which may occur at site as these may become needed.
Reporting Requirements:	To be provided at least 60 days prior to the commencement of any construction activities.

Term and Condition No.	156
Category:	Human Health and Well-Being – Support initiatives
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assist with fostering well-being within point-of-hire communities.
Term or Condition:	The Proponent is encouraged to assist with the provision and/or support of recreation programs and opportunities within the potentially affected communities in order to mitigate potential impacts of employees' absences from home and community life.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	157
Category:	Human Health and Well-Being – Counseling and treatment programs
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To make available, necessary treatment and counseling services for employee and family well-being.
Term or Condition:	The Proponent should consider providing counseling and access to treatment programs for substance and gambling addictions as well as which address domestic, parenting, and marital issues that affect employees and/or their families.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Community Infrastructure and Public Services

Term and Condition No.	158
Category:	Community Infrastructure and Public Services – Impacts to health services
Responsible Parties:	The Proponent, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor indirect Project impacts to health and social services provided by the Government of Nunavut.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut and other parties as deemed relevant in order to develop a Human Health Working Group which addresses and establishes monitoring functions relating to pressures upon existing services and costs to the health and social services provided by the Government of Nunavut as such may be impacted by Project-related in-migration of employees, to both the North Baffin region in general, and to the City of Iqaluit in particular.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	159
Category:	Community Infrastructure and Public Services – Impacts to infrastructure
Responsible Parties:	The Proponent, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor Project-related impacts to infrastructure within the Local Study Area communities.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut to develop an effects monitoring program that captures increased Project-related pressures to community infrastructure in the Local Study Area communities, and to airport infrastructure in all point-of-hire communities and in Iqaluit.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	160
Category:	Community Infrastructure and Public Services – Distribution of benefits
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure the distribution of benefits is done in a way that off-sets Project-related impacts to infrastructure or services.
Term or Condition:	The Government of Nunavut and the Qikiqtani Inuit Association are encouraged to cooperate to ensure in a broad sense, that Project benefits are distributed across impacted communities and across various demographic groups within these communities in a manner that best offsets any Project-related impacts to infrastructure or services.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	161
Category:	Community Infrastructure and Public Services – Policing
Responsible Parties:	The Proponent, Government of Nunavut, Royal Canadian Mounted Police
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure the territorial government and its policing service are adequately prepared to handle any Project-related increases to the need for service and associated impacts.
Term or Condition:	The Government of Nunavut should be prepared for any potential increased need for policing, and ensure that the Royal Canadian Mounted Police is prepared to handle ongoing Project-related demographic changes and subsequent crime prevention that may be needed as a result of the development, operation, and closure of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Culture, Resources and Land Use

Term and Condition No.	162
Category:	Culture, Resources and Land Use – Public consultation
Responsible Parties:	The Proponent, Elders and community members of the North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure the ongoing and consistent involvement of Elders and community members in developing and revising monitoring and mitigation plans.
Term or Condition:	The Proponent should make all reasonable efforts to engage Elders and community members of the North Baffin communities in order to have community level input into its monitoring programs and mitigative measures, to ensure that these programs and measures have been informed by traditional activities, cultural resources, and land use as such may be implicated or impacted by ongoing Project activities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	163
Category:	Culture, Resources and Land Use – Public consultation
Responsible Parties:	The Proponent, North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To involve communities in the development and evolution of management and monitoring plans.
Term or Condition:	The Proponent shall continue to engage and consult with the communities of the North Baffin region in order to ensure that Nunavummiut are kept informed about the Project activities, and more importantly, in order that the Proponent's management and monitoring plans continue to evolve in an informed manner.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	164
Category:	Socio-Economic Impacts – Shipping notification
Responsible Parties:	The Proponent, Elders and community members of the North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	In order to inform members of North Baffin communities of planned Project shipping transits such that community members' planned travel routing may be adjusted to avoid interaction with Project ships and/or ship tracks.
Term or Condition:	The Proponent is required to provide notification to communities regarding scheduled ship transits throughout the regional study area including Eclipse Sound and Milne Inlet, real-time data regarding ships in transit and any

	changes to the proposed shipping schedule to the MEWG and agencies within Pond Inlet on a weekly basis during open water shipping, and to the RSA communities on a monthly basis.
Reporting Requirements:	The information required shall be provided on a monthly basis at a minimum or more often as the Proponent determines necessary and is to be provided to the Proponent's community liaison officers and those of the Qikiqtani Inuit Association as well as the Hunters and Trappers Organizations and Hamlet organizations of the North Baffin communities, Coral Harbour, and the NIRB's Monitoring Officer. Where deviations from the proposed schedule or routing are required, this information shall be provided as soon as possible.

Commentary: Recognizing that at the time of issuance of Amendment No. 1, the Board was advised that the technology to provide "real time" data is only available at the Port sites, the Proponent is required to provide real time data where technologically feasible and to make best efforts to provide information in as timely a manner as possible where reporting real time data is not yet feasible. As real time data reporting become feasible in areas beyond the Port sites, the Proponent is expected to update its reporting practices to provide real time data in compliance with this Condition.

Term and Condition No.	165
Category:	Socio-Economic Impacts – Emergency shelters
Responsible Parties:	The Proponent, Elders and community members of the North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	In order to provide for human safety precautions in the event of adverse weather or other emergency situations along segments of linear transportation infrastructure.
Term or Condition:	The Proponent is strongly encouraged to provide buildings along the rail line and Milne Inlet Tote Road for emergency shelter purposes, and shall make these available for all employees and any land users travelling through the Project area. In the event that these buildings cannot, for safety or other reasons be open to the public, the Proponent is encouraged to set up another form of emergency shelters (e.g. seacans outfitted for survival purposes) every 1 kilometre along the rail line and Milne Inlet Tote Road. These shelters must be placed along Tote Road and rail routing prior to operation of either piece of infrastructure, and must be maintained for the duration of project activities, including the closure phase.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	166
Category:	Socio-Economic Impacts – Public Consultation
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure members of the public are able to access shipping information on

	an as-required basis in order to inform potential users of the scheduled Project activities which could require deviations to land users' schedules or routing.
Term or Condition:	The Proponent should ensure through its consultation efforts and public awareness campaigns that the public have access to shipping operations personnel for transits into and out of both Steensby Inlet port and Milne Inlet port either via telephone or internet contact, in order that any questions regarding ice conditions or ship movements that could assist ice users in preparing for travel may be answered by Project staff in a timely fashion.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Benefits, Royalty, and Taxation

Term and Condition No.	167
Category:	Benefits, Royalty and Taxation – Partnership Agreements
Responsible Parties:	The Proponent, Government of Nunavut
Project Phase:	Construction
Objective:	The Proponent and the Government of Nunavut develop a formalized partnership agreement.
Term or Condition:	The Proponent and the Government of Nunavut are strongly encouraged to, as soon as practical following the issuance of the Project Certificate, enter into discussions to negotiate a Development Partnership Agreement.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Governance and Leadership

Term and Condition No.	168
Category:	Governance and Leadership – Monitoring program
Responsible Parties:	The Proponent, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Outline variables that are relevant to the Project and which should be adopted by the QSEMC's monitoring program.
Term or Condition:	The specific socioeconomic variables as set out in Section 8 of the Board's Report, including data regarding population movement into and out of the North Baffin Communities and Nunavut as a whole, barriers to employment for women, project harvesting interactions and food security, and indirect Project effects such as substance abuse, gambling, rates of domestic violence, and education rates that are relevant to the Project, be included in the monitoring program adopted by the Qikiqtani Socio-Economic Monitoring Committee.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Commentary: As noted previously, if available, the Proponent should also incorporate information regarding the specific variables in Section 8 of the Board's Final Hearing Report that may be monitored under the auspices of the Nunavut General Monitoring Plan.

Term and Condition No.	169
Category:	Governance and Leadership – Monitoring economic effects
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To maintain transparency inform communities in relation to economic benefits associated with the Project.
Term or Condition:	The Proponent provide an annual monitoring summary to the NIRB on the monitoring data related to the regional and cumulative economic effects (positive and negative) associated with the Project and any proposed mitigation measures being considered necessary to mitigate the negative effects identified.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Other Terms and Conditions

Accidents and Malfunctions

Term and Condition No.	170
Category:	Accidents and Malfunctions – Terrestrial Wildlife Management and Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	Updates to plan in order to better understand the potential for, and to minimize possible caribou-railway interactions.
Term or Condition:	The Proponent shall include in an updated Terrestrial Wildlife Management and Monitoring Plan, plans for increased caribou monitoring efforts including weekly winter track surveying and summer and fall surveys undertaken on foot twice per month.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	171
Category:	Accidents and Malfunctions – Terrestrial Wildlife Management and Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Pre-Construction
Objective:	Updates to plan in order to minimize potential for caribou-railway interactions.
Term or Condition:	The Proponent shall include within its updated Terrestrial Wildlife Management and Monitoring Plan, a commitment to establish deterrents

	along the railway and Tote Road embankments at any areas where it is determined that caribou are utilizing the embankments or transportation corridors to facilitate movement and where such movement presents a likelihood of caribou mortality to occur.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	172
Category:	Accidents and Malfunctions – Overwintered fuel vessel
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To provide evidence that vessel to be used is fit and insured for proposed use.
Term or Condition:	The Proponent is encouraged to provide the Government of Nunavut with evidence that the vessel that it intends to use for the overwintering of fuel has been designed and certified for use under the conditions which it is expected to operate, and that it be required to provide copies of the vessel owners' insurance policies.
Reporting Requirements:	The required information is to be provided to the Government of Nunavut as soon as possible, and at a minimum, at least 60 days prior to the commencement of any construction related shipping.

Term and Condition No.	173
Category:	Accidents and Malfunctions – Use of best practices
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure
Objective:	To provide additional spill contingency measures for spills in marine areas.
Term or Condition:	The Proponent shall employ best practices and meet all regulatory requirements during all ship-to-shore and other marine-based fuel transfer events.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	174
Category:	Accidents and Malfunctions – Community level spill response
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure
Objective:	To improve community ability to assist in spill response.
Term or Condition:	The Proponent and the Canadian Coast Guard are required to provide spill response equipment and annual training to Nunavut communities along the shipping route to potentially improve response times in the event of a spill.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	175
Category:	Accidents and Malfunctions – Ship track markers in ice cover
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Hunters and Trappers Organizations of the North Baffin region and Coral Harbour
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To ensure that measures taken to mark the shipping track(s) during periods of ice cover are effective in advising ice-based travelers, and that, where necessary, revisions to this practice can be made to ensure public safety.
Term or Condition:	The Proponent shall, in coordination and consultation with the Qikiqtani Inuit Association and the Hunters and Trappers Organizations of the North Baffin communities and Coral Harbour, provide updates to its Shipping and Marine Mammals Management Plan to include adaptive management measures it proposes to take should the placement of reflective markers along the ship track in winter months not prove to be a feasible method of marking the track to ensure the safety of ice-based travelers.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	176
Category:	Accidents and Malfunctions – Revised spill modeling
Responsible Parties:	The Proponent
Project Phase:	Pre-Construction, Construction Operations, Closure
Objective:	To improve community ability to assist in spill response.
Term or Condition:	The Proponent is required to revise its spill planning to include additional trajectory modeling for areas of Hudson Strait, such as Mill Island, where walrus concentrate, as well as for mid-Hudson Strait during winter conditions as well as for the northern shipping route, including Milne Inlet, Eclipse Sound and Pond Inlet.
Reporting Requirements:	The updated modeling shall be provided to the NIRB, Fisheries and Oceans Canada, and Environment Canada for review at least 3 months prior shipment of bulk fuel to Steensby Inlet or Milne Inlet.

Term and Condition No.	177
Category:	Accidents and Malfunctions – Foreign flagged vessels
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To ensure foreign flagged ships operating in Canadian waters are held to the same standard as domestic ships with regard to emergency response planning.
Term or Condition:	The Proponent shall enroll any foreign flagged vessels commissioned for Project-related shipping within Canadian waters into the relevant foreign program equivalent to Transport Canada's Marine Safety Delegated Statutory Inspection Program.

Reporting Requirements:	To be determined following approval of the Project by the Minister
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Commentary: As expressly noted in the Minister's letter of April 28, 2014, this term and condition applies equally to all aspects of the Mary River Project, including the Early Revenue Phase.

Alternatives Analysis

Term and Condition No.	178
Category:	Alternatives Analysis – Mill Island shipping route consideration
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Nunavut Impact Review Board, Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance
Objective:	To prevent disturbance to walrus and walrus habitat on the northern shore of Mill Island.
Term or Condition:	Subject to safety considerations and the potential for conditions, as determined by the crew of transiting vessels, to result in route deviations, the Proponent shall require project vessels to maintain a route to the south of Mill Island to prevent disturbance to walrus and walrus habitat on the northern shore of Mill Island.
Reporting Requirements:	Where project vessels are required to transit to the north of Mill Island owing to environmental or other conditions, an incident report is to be provided to the Marine Environment Working Group and the NIRB within 30 days, noting all wildlife sightings and interactions as recorded by shipboard monitors. The Proponent shall summarize all incidences of deviations from the nominal shipping route as presented in the FEIS to the NIRB annually, with corresponding discussion regarding justification for deviations and any observed environmental impacts.

Operational Variability

Term and Condition No.	179
Category:	Operational Variability
Responsible Parties:	The Proponent
Project Phase:	Operations
Objective:	To apply the precautionary principle in respect of potential effects on marine wildlife and marine habitat from changes to shipping frequency that may result from a significant increase in mine production for an extended period of time.
Term or Condition:	Baffinland shall not exceed 20 ore carrier transits to Steensby Port per month during the open water season and 242 transits per year in total.
Reporting Requirements:	To be developed following approval by the Minister

Term and Condition No.	179 (a) <i>modified for Production Increase Proposal</i>
Category:	Operational Variability/Flexibility
Responsible Parties:	The Proponent
Project Phase:	Operations
Objective:	To ensure that there are appropriate limits on the Early Revenue Phase Proposal Milne Inlet marine shipping component in order to limit and manage likely project effects, while balancing the need for operational flexibility.
Term or Condition:	In any given calendar year, the total volume of ore shipped via Milne Inlet, shall not exceed 4.2 million tonnes. Until December 31, 2019, the total volume of ore shipped via Milne inlet may exceed 4.2 million tonnes per year, but must not exceed 6.0 million tonnes in any calendar year. After December 31, 2019, the maximum total volume of ore shipped via Milne Inlet in a calendar year returns to 4.2 million tonnes per year, unless this condition has been further modified under s. 112 of <i>Nunavut Planning and Project Assessment Act</i> , S.C. 2013, c. 14, s. 2.
Reporting Requirements:	For each year after the Proponent commences shipping ore via Milne Inlet under the Early Revenue Phase Proposal, the Proponent shall include in the Annual Report to the NIRB, a summary of the total amount of ore shipped via Milne Inlet for the previous calendar year.

Term and Condition No.	179 (b) <i>modified for Production Increase Proposal</i>
Category:	Operational Variability/Flexibility
Responsible Parties:	The Proponent
Project Phase:	Operations
Objective:	To ensure that there are appropriate limits on the Early Revenue Phase Proposal project Milne Inlet Tote Road land transportation component in order to limit and manage likely project effects, while balancing the need for operational flexibility.
Term or Condition:	In any given calendar year, the total volume of ore transported by truck on the Milne Inlet Tote Road shall not exceed 4.2 million tonnes. Until December 31, 2019, the total volume of ore transported by truck on the Milne inlet Tote Road may exceed 4.2 million tonnes per year, but must not exceed 6.0 million tonnes in any calendar year. After December 31, 2019, the maximum total volume of ore transported by truck on the Milne Inlet Tote Road in a calendar year returns to 4.2 million tonnes per year, unless this condition has been further modified under s. 112 of the <i>Nunavut Planning and Project Assessment Act</i> , S.C. 2013, c. 14, s. 2.
Reporting Requirements:	For each year after the Proponent commences transportation of ore via the Tote Road under the Early Revenue Phase Proposal, the Proponent shall include in the Annual Report to the NIRB, a summary of the total amount of ore shipped via the Tote Road for the previous calendar year.

Term and Condition No.	179 (c) <i>New condition for Production Increase Proposal</i>
Category:	Operational Variability/Flexibility
Responsible Parties:	The Proponent
Project Phase:	Operations
Objective:	To ensure commitments made by the Proponent with respect to the 2018 production increase and delivery of benefits to Inuit are adhered to, and, can be determined through a body of evidence.
Term or Condition:	The Proponent shall be required to resource and support a third party to conduct performance audits of commitments made by the proponent in relation to both the IIBA and every proponent commitment and every term or condition of the Project Certificate relating to environmental management of the tote road component or environmental management related to shipping.
Reporting Requirements:	On a bi-annual basis, the Proponent shall file a Performance Audit Report with the NIRB. This report shall include the findings of the third-party auditor, and, Baffinland's commitment to addressing the findings of the auditor. This term and condition will remain in force for the duration of the Mary River project, unless it is modified under the <i>Nunavut Planning and Project Assessment Act</i> .

Transboundary Effects

Term and Condition No.	180
Category:	Transboundary Effects – Makivik Corporation involvement in the Marine Environment Working Group
Responsible Parties:	The Proponent, members of the Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enable Makivik Corporation and Nunavik communities near shipping lanes to remain informed and involved in those shipping activities which could affect the marine environment and marine mammals.
Term or Condition:	The Marine Environment Working Group established for this Project shall invite a representative from Makivik Corporation to be a member of the Group
Reporting Requirements:	To be developed following approval by the Minister

Commentary: As expressly noted in the Minister's letter of April 28, 2014, this term and condition applies equally to all aspects of the Mary River Project, including the Early Revenue Phase.

Term and Condition No.	181
Category:	Transboundary Effects – Marine Environment Working Group reporting
Responsible Parties:	The Proponent, members of Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enable Makivik Corporation and Nunavik communities near shipping lanes to remain informed and involved in those shipping activities which could affect the marine environment and marine mammals.
Term or Condition:	Regardless of whether Makivik Corporation participates as a member of the Marine Environment Working Group, the Marine Environment Working Group will provide Makivik Corporation with regular updates regarding the activities of the Marine Environment Working Group throughout the Project life cycle.
Reporting Requirements:	To be developed following approval by the Minister

Commentary: As expressly noted in the Minister's letter of April 28, 2014, this term and condition applies equally to all aspects of the Mary River Project, including the Early Revenue Phase.

Term and Condition No.	182
Category:	Transboundary Effects – Reporting to Marine Environment Working Group (MEWG)
Responsible Parties:	The Proponent, Makivik Corporation
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enable Makivik Corporation and Nunavik communities near shipping lanes to remain informed and involved in those shipping activities which could affect the marine environment and marine mammals.
Term or Condition:	Baffinland shall make available to Makivik Corporation any ship route deviation reports provided to the NIRB in accordance with the terms and conditions set out in Section 4.12.4 of the Final Hearing Report.
Reporting Requirements:	To be developed following approval by the Minister

Commentary: As expressly noted in the Minister's letter of April 28, 2014, this term and condition applies equally to all aspects of the Mary River Project, including the Early Revenue Phase.

Verification of Project Monitoring and Mitigation For Potential Effects on Marine Mammals

Term and Condition No.	183 New condition for Production Increase Proposal
Category:	Project monitoring of impacts to marine mammals
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To address concerns associated with the potential for impacts to marine mammals, and compliance and enforcement of terms and conditions in Project Certificate No. 005 relating to ship-based observer programs, noise exposure assessments, and the identification of other mitigation measures that have the potential to further reduce potential impacts to marine mammals.
Term or Condition:	The proponent shall collaborate with the Marine Environmental Working Group to develop impact avoidance or mitigation strategies for the protection of the marine environment. The proponent shall implement any direction from the Department of Fisheries and Oceans for any avoidance or mitigation measures, including cessation of any activity, for the protection of the marine environment.
Reporting Requirements:	Results of the observer program shall be provided in the Annual Report to the Board. Further, Baffinland shall report annually all data it generates from the implementation of monitoring of marine impacts it is required to implement pursuant to the Terms and Conditions of the Project Certificate.

Term and Condition No.	184 New condition for Production Increase Proposal
Category:	Project monitoring of impacts to marine mammals
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To address concerns associated with the potential for impacts to marine mammals, and compliance and enforcement of terms and conditions in Project Certificate No. 005 relating to ship-based observer programs, noise exposure assessments, and the identification of other mitigation measures that have the potential to further reduce potential impacts to marine mammals.
Term or Condition:	The proponent shall collaborate with the Marine Environmental Working Group to review the status of compliance with, and implementation of, all of the Terms and Conditions in Project Certificate No. 005 related to marine environmental protection.
Reporting Requirements:	Results of the observer program shall be provided in the Annual Report to the Board. Further, Baffinland shall report annually all data it generates from the implementation of monitoring of marine impacts it is required to implement pursuant to the Terms and Conditions of the Project Certificate.

APPENDIX A – MONITORING PROGRAM

[To be developed]