

Nunavut Impact Review Board Reconsideration Report and Recommendations

Production Increase Proposal

Baffinland Iron Mine Corporation

NIRB File No. 08MN053



INSIDE COVER PAGE



The Nunavut Impact Review Board's Primary Objectives under the *Nunavut Agreement*, Article 12, Section 2.2.5:

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.

The Nunavut Impact Review Board's Primary Objectives under the *Nunavut Planning and Project Assessment Act*, S. C. 2013, c. 14, s. 23 states:

- 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.

Contact Information:

Nunavut Impact Review Board PO Box 1360, 29 Mitik Street Cambridge Bay, NU X0B 0C0 Telephone: (867) 983-4600

Facsimile: (867) 983-2594

Cover Photo Credits: NIRB staff

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.

Emland	Phack
Elizabeth Copland	Phillip (Omingmakyok) Kadlun
Chairperson	Board Member
M. Karg Kally	Alaffel
Marjorie Kaviq Kaluraq	Allen Maghagak
Vice Chairperson	Board Member
mfut	Carherine Emiles
Madeleine Qumuatuq	Catherine Emrick
Board Member	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 Intervenors 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;
- 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 <u>not</u> be approved to proceed to the permitting stage at this time. The Board's determination recognizes the comments of Intervenors, 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 Intervenors 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.

$\Phi \nabla^{\mu} C \nabla^$

 $\dot{\Delta}$ >? 30, 2018-Γ° $\dot{<}$ ልትር አልትር አልናንትኒያ ኦንናት ታላኝት ታላንት ላላ አስት ($\dot{<}$ ልትር ኦኖር ኦኖሬታት ለሃብስቴትጋና) ጋ ታሪር ኦቤር ውልቃት $\dot{<}$ ናልልትው (NPC ኦኖፌታት ኦር ኦΓነት) ላት ውልቃት ላዊበር ቤት ላይ አጠራት የነር ውልቃት $\dot{<}$ ናልልትው (NPC ኦኖፌታት ኦር ኦΓነት) ላት ውልቃት ላዊበር ቤት ላይ አጠራት የነር ውልቃት $\dot{<}$ ናልልትው (NPC ኦኖፌታት ኦር ኦΓነት) ላት ውልቃት ላዊበር ቤት ላይ አጠራት ለተስራት ለተስራት

- ዻ፞ጕየላልታ ዾርተ 380-ታ Δዾቴን-ፌግጋና ጋላፕልኣና ዾዾንት ምህላር Δ৬ናልቴናልላታ.
- 4^{h} - 1^{h} - 1^{h

 $\dot{\lt}$ å° $\dot{\lt}$ ° $\dot{\lor}$

- $\footnote{iff} $$ \footnote{iff} $$ $$ $$ $$ $$ $$ $$ $$ $$ $$$
- \triangleright % \triangleright 7°+ $^{\circ}$ 9°+ $^{\circ}$ 9°
- P'dcLσ' Δ/Lin&σ' Ddd Da>' T danch'd bnl>" Collocht 4cD not 2 del

b∩Lት Λ
\(\delta \cdot \

- Δ_Γ
 Φ"/
 Δ_Γ
 Δ_Γ
- ዻ፞፞የ•ፘዾኇ፨ ዾርተና 380-ታ ዾዾጜጋና ጋጚተልጜተና ዾዾ፞ጛ፞ና 'የሚፈር Δጜናልቴናልፈታ'.

 $b \cap L^{\lambda^c}$ $\wedge d \sigma^b \wedge d \circ \Gamma \wedge \ell^c$ $\wedge \ell^b \circ d \circ \ell^c$ $\wedge \ell^c \circ \ell^c$

 $C\Delta L\Delta^{\circ}\sigma^{\circ}U_{\Delta^{\circ}}$, $b \cap L\dot{\lambda}$ $\dot{\alpha}$ የነገር $b^{\circ}\sigma^{\circ}$ $\Delta^{\circ}\Gamma$ ($b^{\circ}\sigma^{\circ}\Gamma$ $\dot{\alpha}$ $b^{\circ}\Gamma$ $\dot{\alpha}$ $\dot{\alpha}$

 $b \cap L \dot{\lambda}^c$ የ $b \cap \lambda \leftarrow b \cap C^c$ የ $b \cap \lambda \leftarrow b \cap C^c$ የ $b \cap C^c$ የየሚላወና የተፈናላት የተፈናላት የተፈናሪት የተፈ

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 <u>ne pas</u> 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 dévelopement 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 Intervenors 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

Eppland

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

INSI	DE COVE	ER PAGE	i
SIGN	NATURE 1	PAGE	ii
EXE	CUTIVE	SUMMARY	iii
cov	ER LETT	ER	xii
TAB	LE OF CO	ONTENTS	xv
LIST	OF TAB	LES	xvi
1.	INTRO	ODUCTION	1
	1.1 1.2 River I 1.3 1.4 1.5	Purpose of this Report The NIRB's Assessment of the Production Increase Proposal in the Context of the OProject The Production Increase Proposal Board Guidance to Proponent in Preparation of Impact Assessment of Production Incre 9 Procedural History Evidentiary Issues	riginal Mary44 .ase Proposal
2.	PROP	ONENT'S ASSESSMENT OF THE PRODUCTION INCREASE PROPOSAL	15
	2.1 2.2 2.3 2.4	Project Description Potential Changes to Ecosystemic Effects Potential Changes to Socio-Economic Effects Baffinland's Response to The Comments and Concerns of Other Parties	15 18
3. 4.		AARY OF INTERVENOR SUBMISSIONSULTATION OPPORTUNITIES	
	4.1	Public Consultation	24
5.	SUMN	MARY OF CONCLUSIONS AND RECOMMENDATIONS OF THE BOARD	26
	5.1 5.2	Ecosystemic Effects	
6. 7. PRO	RECO	MMENDATION TO THE MINISTER MMENDATIONS REGARDING CHANGES TO EXISTING PROJECT MONITO RTIFICATE TERMS AND CONDITIONS	ORING OR
	7.1	Changes to the NIRB's Monitoring Program	32
APP	ENDIX A	LIST OF ACRONYMS	A-1
ΛDD	ENDIX	R COMMUNITY INFORMATION SESSION	Λ 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	
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	oT 6
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

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 icebreaking 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 purposebuilt 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; 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)?

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 In any given calendar year, the total volume of ore shipped via Milne Inlet 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.

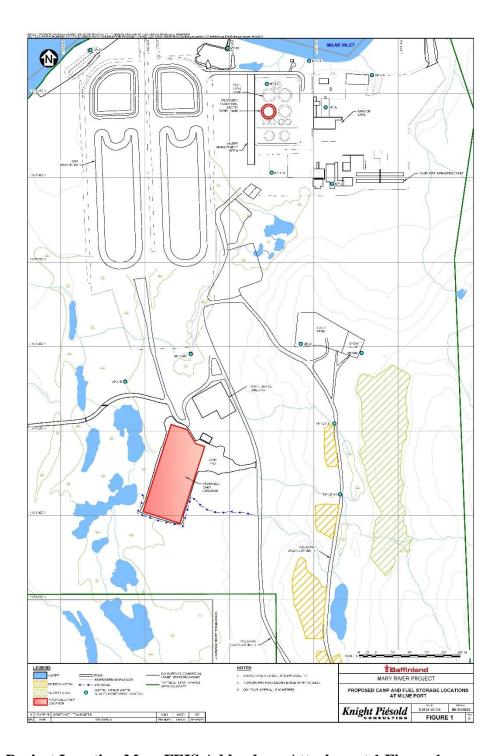


Figure 1: Project Location Map, FEIS Addendum, Attachment 1 Figure 1

In the Production Increase Proposal, Baffinland acknowledged that the increased ore handling, including transportation and marine shipping, as well as supporting activities, could result in increased impacts beyond those previously assessed for the original Mary River Project; however due to these activities being located within the existing Project Development Area for the Mary

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 (oneway)	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.

Procedural History 1.5

Key Procedural Steps in the Reconsideration 1.5.1

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 "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)]	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: 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: 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: 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, Intervenors, 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	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. 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. 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.	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	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>	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
		increases in the magnitude, probability, and frequency of effects. However, with existing mitigation, the environmental effects evaluated to remain not significant.	
Freshwater Environment • 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. 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.	Anticipated effects managed through monitoring, mitigation, and management practices: •Surface Water and Aquatic Ecosystems Management Plan
Marine Environment • 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 icemelting/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	Anticipated effects managed through monitoring, mitigation, and management practices: •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	Potential Change in	Description of Change	Applicable Mitigation and
Component	Effects from Mary		Monitoring
	River FEIS		
		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. 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.	

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	Change; positive	Proposed activities around the Mine Site, the	The anticipated socio-economic
 Employment and 	Change; not	Tote Road, and Milne Port could result in	effects will be managed through
Economy	significant	potential for interactions or conflicts with land	existing monitoring, mitigation,
 Community Services 		and resource users in these areas. Potential for	and management practices.
and Infrastructure		increased Inuit harvesting through improved	
 Community Health 		ease of access to the RSA and/or enhanced	
and Well-being		knowledge of the region by hunters (i.e., due to	
• Culture, Resources,		increased human presence). However, most	
and Land Use		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	
1		surveyed and mitigated. Potential changes to	
1		factors related to significance include increases	
1		in the magnitude, probability, and frequency of	
		positive effects.	

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:
 - o 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
 - o 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:
 - O 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
Party QIA	 Comments in Summary Form ■ General: Outlined commitments for the "Project Stabilization" 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: 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
J	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
CN	No concerns regarding socio-economic effects
GN	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
	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	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
ECCC	used to manage possible changes in impact levels.
ECCC	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
	be management. The addendum does not confirm if the existing pond has the
	capacity to handle the required runoff for a larger stockpile.
DFO	 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 provided 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
	1
PC	 'Request for Review' prior to beginning stream diversion construction. 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	 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	 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	
	recommends the NIRB revisits the intentions for the group and take on great responsibility for structure and function of the working group. 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: 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	 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.

	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 EFFE	CCTS
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 Intervenors 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
- o 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, Intervenors 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 socioeconomic 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" 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 ▷%▷▷' αΔά%√L≺ INUKTITUT

᠕ᡗᢦᢨᠾᡃᠦᡥᡳᡴᠾ

CEA Cumulative Effects Assessment

 0^{5}

CIRNAC Crown Indigenous Relations and Northern Affairs Canada

U9L6dc Da6b6b6Dc VCV6DU620L Array D666C6DLc

Previously ACLAUK back

INAC Indigenous and Northern Affairs Canada

ρστισος συτρώφωση συτρώφωση 12 στη συτ

COPC Constituents of Potential Concern

᠘᠘ᡛ᠋᠆ᢗᠵ᠙᠘᠘᠘᠙᠘ᠳ᠘᠘᠘᠘᠘᠘

DFO Fisheries and Oceans Canada

bacr Δ¹bacn² ΔL¹Γbccn²bacr

ECCC Environment and Climate Change Canada

ᡏ᠘ᡊᠲ᠘ᡶ᠘ᠸ᠘ᢢ᠘ᢢᡲᠵᡳ᠘ᡆ᠘ᡀ

EIS Environmental Impact Statement

Dσ⁶b⊂

EMP Environmental Management Plan

FEIS Final Environmental Impact Statement

P%J'C%<% 4&ULPCA.

GN Government of Nunavut

ᠫᢗ᠘ᡒᠮ

HTO Hunters' and Trappers' Organization

4464.Q 454.Q 454.Q

ACRONYM ENGLISH

>5b>/ic QΔQc5b/L-tc INUKTITUT

᠕ᡗᢦᢨᠾᡝᠦᡲᡗᡣᡗᢆ

IIBA Inuit Impact and Benefit Agreement

᠘᠘᠘ᢉᢦ᠑ᡥᢗᢀᡏᡥᠾ᠙᠘᠙᠘ᢥ᠘ᠰᡬᠫᢛᢗ᠕᠙᠘ᡧ᠘ᡧᢕᢓᢛ᠘᠘ᡎᢕ᠘᠘ᡯ

 $4^{\circ}\Gamma$

IOL Inuit Owned Land

 $\Delta \Delta \Delta_c \Delta \sigma_i dU_s L_c$

IPG Institution of Public Government

᠘ᠫᡑ᠘᠙᠘᠙᠘᠙᠘

IR Information Request

 $DY_{\bullet}UCDUQ_{\bullet}D_{\bullet}CDUQ_{\bullet}D_{\bullet}CDUQ_{\bullet}CDU$

Mt Million tonnes

۲⊂⊲۰ ۲۰۰

Mt/a Million tonnes per annum (year)

NIRB Nunavut Impact Review Board

~~\$L 46U⊂√7pq, PUF7€L

NPC Nunavut Planning Commission

ᠴᡆᠫ᠇᠘<᠈ᠳ᠐ᡷᡕ

NRCan Natural Resources Canada

POLL POLLACTION

NTI Nunavut Tunngavik Incorporated

~~~° >~U^<PP~ \\

Nunavut Agreement Agreement between the Inuit of the Nunavut Settlement Area

\_\_\_\_\_\_ and Her Majesty the Queen in right of Canada

Λτορη βαςΓ

NuPPAA Nunavut Planning and Project Assessment Act

\_o\_&Γ<5\_Δσ5JC ΔL Λ<\_\_Δ65JC 8D25%CDσ6Lc-UTC

ACRONYM ENGLISH
▷¹Ы▷¬¹ Q∆Ò¬¹Ы¬Ы¬¹
INUKTITUT

 $\Lambda$ ቦ፭⁴∿ሁ $\sigma$ ∿ቦበJ $^{\circ}$ 

NWB Nunavut Water Board

 $\Delta \Phi \to \Gamma \Delta \Gamma \Phi$ 

RSA Regional Study Area

ᠴᡆᡤ᠙᠔᠀ᢛ᠘ᡏ᠔ᢛ᠘ᠾ᠘ᡀ᠘ᡀ᠙᠘᠙᠘᠘᠙᠘᠙᠘᠙᠘᠙᠘᠙᠘᠙

SEMC Socio-Economic Monitoring Committee

ΔΔCΛσ<sup>56</sup> -Λ<br/>
-Λ<

᠘ᠳ᠘᠘ᡎ᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘᠘

ᡩ᠐᠘᠘᠙᠙ᢗᢆᡆᡥᠾᢛᢆᠥ᠙᠐᠘ᢣ᠘ᠸᢆ

TC Transport Canada

 $POCL \nabla_{\sigma}U_{c} d + U_{c} d + U_{c$ 

TDS Total Dissolved Solids

ADPLY C ADPLY C BOLDC ADPLY

TK Traditional Knowledge

᠘᠘᠙᠘᠘᠘᠘᠘᠘᠘

VEC Valued Ecosystem Component

ᢄ᠘ᢞᡆ᠉᠘ᠸᡶᡕ᠂ᡐ᠙ᡣᡥᡳ᠘᠘᠘ᢐ᠈᠘᠘᠘ᠰ᠘ᠰ

VSEC Valued Socio-Economic Component

# **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       | There is an area for ore ships while they wait their turn. Could be there for up  |
| environment, | to three days. Been 2 years now and west of Pond Inlet and in the inlets lots of  |
| Shipping     | hunters there and ships waiting in Milne Inlet. This is too much as ships are     |
|              | vey 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      |

### 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. Lots of cruise ships coming and not all ore ships and everyone southern and northern need to work together so things run more smoothly. Wildlife 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 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. 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. With all the ships the water will be affected in the wrong way. Listen to what we have to say. 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. 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. We would like to see compensation to hunters from shipping and mining. Wildlife has been impacted as well. We live off the land. 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. 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

| 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                       |

#### Socioeconomics

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. (Baffinland responded to this stating that they are in the process of negotiating to build a training centre in Pond Inlet.)

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

was given no warning and it was really dusty, hard to know which HR to go to.

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.

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.

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.

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.

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

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.

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.

#### Other

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.

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.

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.

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.

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.

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.

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.

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.