



Nunavut Impact Review Board 2023-2024 Monitoring Report

Mary River Project Project Certificate No. 005

Baffinland Iron Mines Corp.

NIRB File No. 08MN053



March 2025

Report Title: The Nunavut Impact Review Board’s 2023 – 2024 Annual Monitoring Report for the *Mary River Project* (NIRB File No.: 08MN053)

Project: Mary River Iron Ore Mine

Project Location: Qikiqtani (North Baffin) Region, Nunavut

Project Owner: Baffinland Iron Mines Corporation (Baffinland)

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Cover photo: Mary River Mine Site

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List of Acronyms

AEMP	Aquatic Effects Monitoring Plan
AIS	Aquatic Invasive Species
AWAR	All-weather access road
CAAQS	Canadian Ambient Air Quality Standards
CCG	Canadian Coast Guard
CCME	Canadian Council of Ministers of the Environment
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CREMP	Core Receiving Environment Monitoring Program
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
ERP	Early Revenue Phase
EWI	Early Warning Indicators
FAA	<i>Fisheries Act</i> Authorization
FEIS	Final Environmental Impact Statement
GHG	Greenhouse Gases
GN	Government of Nunavut
GN-DOE	Government of Nunavut, Department of Environment
HC	Health Canada
HHS	Hunter Harvest Study
HTO	Hunters and Trappers Organization
IIBA	Inuit Impact and Benefit Agreement
IMO	International Maritime Organization
INAC	Indigenous and Northern Affairs Canada
LSA	Local Study Area
MDMER	Metal and Diamond Mining Effluent Regulations
MEEMP	Marine Environmental Effects Monitoring Plan
MEWG	Marine Environment Working Group
MHTO	Mittimatalik Hunters and Trappers Organization
ML	Million litre
MMON	Marine Mammal Observation Network
Mtpa	Million tonnes per annum
MWO	Marine wildlife observer
NIRB	Nunavut Impact Review Board
NIS	Non-Invasive Species
NPC	Nunavut Planning Commission
<i>Nunavut Agreement</i>	<i>Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada</i>
<i>NuPPAA</i>	<i>Nunavut Planning and Project Assessment Act</i> , S.C. 2013, c. 14, s. 2
NWB	Nunavut Water Board
ON	Oceans North
PAG	Potentially Acid Generating
PC	Parks Canada

PIAMP	Post-Impact Assessment Monitoring Program
PIP	Production Increase Proposal
PIPR	Production Increase Proposal Renewal
PM _{2.5}	Particulate matter with diameters of 2.5 microns
QIA	Qikiqtani Inuit Association
QSEMC	Qikiqtaaluk Socio-Economic Monitoring Committee
RSA	Regional Study Area
SEMWG	Socio-economic Monitoring Working Group
SEMP	Socio-economic Monitoring Program
SOP	Sustaining Operations Proposal
SOP2	Sustaining Operations Proposal 2
SSRP	Spill at Sea Response Plan
TARP	Trigger Action Response Plan
TC	Transport Canada
TEAMP	Terrestrial Environment Annual Monitoring Report
TEMMP	Terrestrial Ecosystem Mitigation and Monitoring Plan
TEWG	Terrestrial Environment Working Group
ToR	Terms of Reference
TSS	Total suspended solids
VEC	Valued Ecosystemic Component
WRP	Work Ready Program
WRF	Waste Rock Facility

1.0 INTRODUCTION

The Nunavut Impact Review Board (NIRB or Board) was established through Articles 10 and 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and is responsible for the assessment of ecosystemic and socio-economic impacts of projects in the Nunavut Settlement Area according to the *Nunavut Agreement*. The NIRB is responsible for post-environmental assessment monitoring of projects in accordance with Part 7 of Article 12 of the *Nunavut Agreement* and s. 135 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*).

The purpose of the NIRB's monitoring program as outlined in Section 12.7.2 of the *Nunavut Agreement* and s. 135(3) of the *NuPPAA* are:

- a) measure the impact of the project on the ecosystemic and socio-economic environments of the designated area;
- b) determine whether the project is carried out in accordance with the terms and conditions imposed under subsection 152(6) or set out in the original or amended project certificate;
- c) provide the information necessary for regulatory authorities to enforce the terms and conditions of licences, permits or other authorizations that they issue in relation to the project; and
- d) assess the accuracy of the predictions contained in the project impact statement.

This report provides findings that resulted from the Board’s monitoring program for Baffinland Iron Mines Corporation’s (Baffinland) Mary River Iron Ore Project (Mary River Project or the Project) from October 1, 2023 to September 30, 2024. The observations were made under the requirements of Project Certificate No. 005, Amendment 05.

2.0 PROJECT OVERVIEW

2.1 PROJECT COMPONENTS

The Mary River Project (NIRB File No. 08MN053) is located approximately 150km southwest of Pond Inlet on Northern Baffin Island (Figure 2-1). The Mary River project as *amended* and currently constructed, consists of four (4) main components: the Mary River Mine Site, the 100 km long Milne Inlet Tote Road, the Milne Port facility located north of the Mine site and the Northern Shipping Route. The mine operations include open pit mining of Deposit No. 1, crushing, transporting and stockpiling of ore 12 months of the year between the Mine Site, the Tote Road and Milne Port. The Project as originally proposed, included the construction of a railway approximately 150 km in length to connect the Mine Site to Steensby Port (located to the south); however, this infrastructure is yet to be constructed. The mine and Northern transportation infrastructure is in the operations stage, while the Steensby portion is not yet in the construction phase.

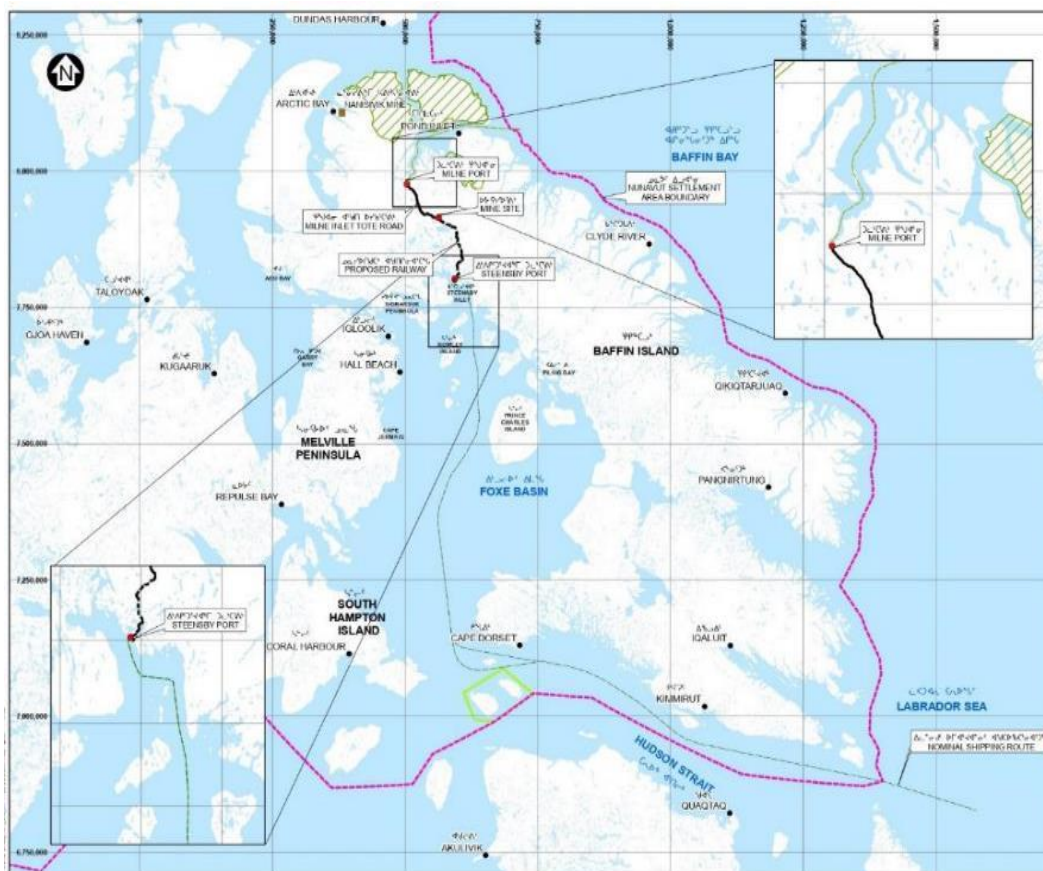


Figure 2-1: Project Location Map

As currently approved under Project Certificate No. 005, *Amendment No. 05*, the ore is crushed at the Mine Site and transported by truck along the Tote Road then shipped from Milne Port during the open water season using contracted vessels (referred to as the Northern Transportation Route; Figure 2-2). The approved *amended* Project also includes additional facilities at Milne Port, including a fixed ore dock, ore stockpile and reclaim area, ship loading facilities and an accommodations camp. The 4.2 Mtpa ERP operations are expected to continue for the life of the Project; however, the increased transport and shipping of up to 6.0 Mtpa of iron ore granted under the SOP was approved until December 31, 2024.

Baffinland reported in the *2023 Annual Report* that mining and ore hauling activities from the Mine Site to Milne Port continued and that approximately 6.0 Mtpa of iron ore was mined and hauled on the Tote Road and approximately 5.5 million tonnes (Mt) of ore was transported by ore haul trucks along the Tote Road from the Mine Site and stockpiled at Milne Port. During the 2023 shipping season, approximately 6.1 Mt of ore was shipped from Milne Port to international markets, using 75 individual ore carrier voyages.

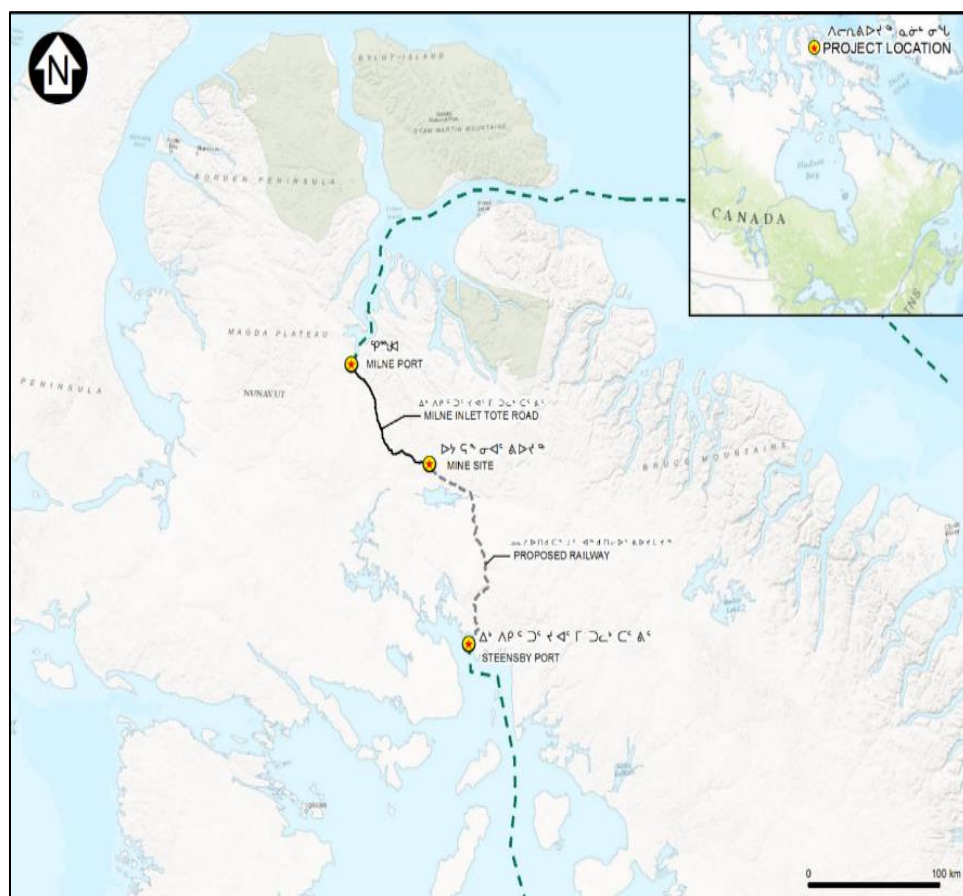


Figure 2-2: Mary River Project transportation Corridors¹

¹ The Northern Transportation Corridor from the Mine Site to Milne Inlet and Eclipse Sound is the only currently operation transportation route. The Corridor from the Mine Site south to Steensby Inlet and Foxe Basin has not yet been constructed.

2.2 Project History

[Table 2-1](#) provides a summary of the Mary River Project history and current status with further details provided in the sections below.

Table 2-1: Mary River Project History.

DATE	MILESTONE
December 28, 2012	The NIRB issued Mary River Project Certificate No. 005.
April 29, 2014	The then-Minister of Aboriginal Affairs and Northern Development Canada accepted the NIRB's determination allowing the Mary River Project to proceed.
September 2014	Baffinland commenced operations of the Mary River Project.
January 13, 2013	Baffinland issued correspondence proposed the "Early Revenue Phase" (ERP Proposal) which included the development of a 3.5mtpa road haulage operation from the Mary River mine site to a port facility at Milne Inlet for shipping of iron ore during the open water season only.
March 17, 2014	NIRB issued its Public Hearing Report concluding that the <i>ERP Proposal</i> may proceed subject to several recommended changes to the existing terms and conditions of the Project Certificate.
April 28, 2014	The then-Minister of Aboriginal Affairs and Northern Development accepted the Board's recommendation that the <i>ERP</i> be allowed to proceed and approved the recommended changes to specific terms and conditions, varied nine (9) and rejected one (1) new term and condition.
May 28, 2014	NIRB issued amendment No 01 for the Mary River Project Certificate No. 005.
April 30, 2018	Baffinland submitted the "Production Increase, Fuel Storage and Milne Port Accommodations Modification Proposal" (<i>Production Increase Proposal</i>) to the NIRB for an increase in the volume of ore that would be trucked from Mine site to Milne Port via the Tote Road from 4.2 Mtpa to 6.0 Mtpa. The proposal further included the addition of a 15 million liter (ML) diesel fuel tank within the existing Fuel Storage Facility at Milne Port and installation of a new 380-person accommodation at Milne Port.
May 29, 2018	NIRB received a referral from the NPC to assess Baffinland's "Phase 2 Development Proposal".
August 31, 2018	NIRB issued its Reconsideration Report and Recommendations for the <i>Production Increase Proposal</i> recommending the camp upgrades and fuel storage expansion to proceed; however, the Board recommended that the increased transportation and shipping of ore not be allowed to proceed.
September 30, 2018	Then-Minister of Intergovernmental, Northern Affairs and Internal Trade along with the responsible Ministers accepted the Board's recommendations for the <i>Production Increase Proposal</i> ; however, the Minister varied three (3) terms and conditions allowing a time-limited increase in production and transport of the iron ore from 4.2 Mtpa to 6.0 Mtpa until the end of 2019 and added three (3) additional terms and conditions to mitigate potential impacts to marine mammals.

DATE	MILESTONE
October 30, 2018	NIRB issued amendment No 02 for the Mary River Project Certificate No. 005.
December 6, 2019	Baffinland requested that the Board consider modifying Terms and Conditions 179(a) and 179(b) of the Project Certificate No. 005 (the Extension Request to the Production Increase Proposal or “Extension Request”) authorization Baffinland to transport and ship (via Milne Inlet) up to 6.0 Mtpa of iron ore by one (1) additional year to December 31, 2020.
March 4, 2020	NIRB issued its Reconsideration Report and Recommendations for the <i>Extension Request</i> concluding that further modification to Terms and Conditions 179(a) and 179(b) were required to allow for the continuation of the 6.0 Mtpa rate of transportation and shipping associated with Baffinland’s Extension Request. The Board also extended the amendments to the modified terms and conditions to December 31, 2021.
May 19, 2020	The then-Minister of Northern Affairs along with the responsible Ministers accepted the Board’s recommendations for the <i>Extension Request</i> and varied Terms and Conditions 179(c) and 183 in relation to Baffinland’s Extension Request.
June 18, 2020	NIRB issued amendment No 03 for the Mary River Project Certificate No. 005.
May 13, 2022	NIRB issued its Reconsideration Report and Recommendations for the <i>Phase 2 Development Proposal</i> recommending the project should not be allowed to proceed at this time.
June 13, 2022	Baffinland submitted a request to further modify Terms and Conditions 179(a) and 179(b) as part of their <i>PIP Renewal</i> to allow trucking and shipping of 6.0 Mtpa of iron ore (via Milne Inlet) to continue until December 31, 2022.
September 22, 2022	NIRB issued its Reconsideration Report and Recommendations for the <i>PIP Renewal</i> noting that revisions to the expiry date in Terms and Conditions 179(a) and 179(b) were required and proposed improvements to the mitigation, adaptive management, and monitoring programs for the <i>PIP Renewal</i> .
October 4, 2022	The Minister of Northern Affairs on behalf of the responsible Ministers accepted the NIRB’s recommendations regarding the <i>PIP Renewal</i> , and added five (5) new terms and conditions and varied three (3) others in order to adequately mitigate adverse eco-systemic and socio-economic impacts related to the original and amended project.
November 3, 2022	NIRB issued amendment No 04 for the Mary River Project Certificate No. 005.
November 16, 2022	The Minister of Northern Affairs along with the other responsible Ministers accepted the Board’s recommendation that the <i>Phase 2 Development Proposal</i> should not proceed at this time.

DATE	MILESTONE
February 2, 2023	NIRB received a positive conformity determination from the NPC regarding Baffinland's "Sustaining Operations Proposal" (SOP) noting the proposal represented a significant modification to the previously approved project and forwarded the modification to the NIRB for further consideration.
September 13, 2023	NIRB issued its Reconsideration Report and Recommendations determining that the <i>SOP</i> be allowed to proceed to the permitting stage, subject to several recommended changes to the existing terms and conditions of the Project Certificate.
October 17, 2023	The Minister of Northern Affairs, on behalf of the Responsible Ministers accepted the Board's recommendation that the <i>SOP</i> be allowed to proceed and approved the recommended changes to specific terms and conditions.
November 17, 2023	NIRB issued amendment No 05 for the Mary River Project Certificate No. 005.
December 31, 2024	As of December 31, 2024, the 6.9 Mtpa extension to the volume of Ore that can be transported and shipped under the Sustaining Operations Proposal expired and the Tote Road transportation and Milne Inlet shipping limits Inlet have reverted back to 4.2Mtpa.

2.2.1 ORIGINAL PROJECT – THE MARY RIVER PROJECT

On December 28, 2012, the NIRB issued Project Certificate No. 005 for Baffinland Iron Mines Corporation's Mary River Project. The original Project as approved in 2012 consisted of the development of an open pit iron ore mine (Deposit No. 1) on northern Baffin Island at a production rate of 18 million tonnes per annum (Mtpa) and 20% operational flexibility associated with marine shipping from Steensby Port. It included the use of an existing Tote Road between Milne Inlet and the Mine Site at Mary River and the development of a railway connecting the Mary River Mine Site to the Steensby Port (Figure 2-2) to ship approximately 18 Mtpa of iron ore year-round. When Steensby Port became operational, Baffinland proposed to also use Milne Port occasionally for the delivery of oversized equipment for the Mine Site. Several elements of the original Project have not been constructed including: the port at Steensby Inlet, the railway from the Mine Site to Steensby Inlet, and the fleet of purpose-built ore carriers. Further information on the original project can be found on the NIRB's public registry.

2.2.2 THE EARLY REVENUE PHASE PROPOSAL (AMENDMENT NO. 01)

In January 2013, Baffinland applied for the Early Revenue Phase (ERP) Proposal, an amendment to the original Mary River Project, seeking to modify the project by allowing the transport of 3.5 Mtpa of ore (up to 4.2 Mtpa if Operational Flexibility was required) along the Tote Road North to Milne Port for shipment along the Northern Transportation Corridor during the open water season. The modification was proposed to generate sufficient revenue to fund the construction of the Steensby Components and to allow the Mary River Project to commence operations as originally planned. In May 2014, the NIRB issued Project Certificate 005 Amendment No. 01.

2.2.3 PRODUCTION INCREASE PROPOSAL (AMENDMENT NO. 02)

In April 2018, Baffinland submitted the “*Production Increase, Fuel Storage and Milne Port Accommodations Modification Proposal*” (Production Increase Proposal) to the NIRB for an increase in the volume of iron ore that would be trucked from Mine site to Milne Port via the Tote Road from 4.2 Mtpa to 6.0 Mtpa until the end of 2019. The proposal further included the addition of a 15 million liter (ML) diesel fuel tank within the existing Fuel Storage Facility at Milne Port and installation of a new 380-person accommodation at Milne Port.

Following the Board’s reconsideration process, in August 2018, the NIRB recommended to the then-Minister of Intergovernmental, Northern Affairs and Internal Trade that the camp upgrades and fuel storage expansion proceed; however, the Board recommended that the increased transportation and shipping of ore not be allowed to proceed. In September 2018, the then-Minister accepted the Board’s recommendations however, the responsible Ministers varied three (3) terms and conditions of the Project Certificate allowing a time-limited increase in production and transport of the iron ore until the end of 2019 and added three (3) additional terms and conditions. In October 2018, the NIRB issued Project Certificate 005 Amendment No. 02.

2.2.4 EXTENSION REQUEST TO PRODUCTION INCREASE PROPOSAL (AMENDMENT NO. 03)

On December 6, 2019, Baffinland requested the Board to further modify Conditions 179(a) and 179(b) of the Mary River Project Certificate² as part of their “*Extension Request to the Production Increase Proposal*” (the Extension Request) because of the suspension of the Phase 2 Development Proposal Hearing (see [Section 2.2.7](#)). Following the Board’s reconsideration process, in March 2020, the NIRB issued its Reconsideration Report and Recommendations to the Responsible Ministers recommending Baffinland’s Extension Request allowed to proceed by modifying Terms and Conditions 179(a) and 179(b). Further, the Board extended the amendments to the terms and conditions to December 31, 2021. In May 2020, the then-Minister of Northern Affairs accepted the Board’s recommendations and also varied Terms and Conditions 179 (c) and 183 in Project Certificate No. 005. Subsequently, the NIRB issued the amended Project Certificate 005 Amendment No. 03.

2.2.5 PRODUCTION INCREASE PROPOSAL RENEWAL (AMENDMENT NO. 04)

While waiting for the Ministers’ Decision on the Phase 2 Development Proposal (see [Section 2.2.7](#)), Baffinland submitted an application in June 2022 requesting the NIRB to further modify Conditions 179(a) and 179(b) of the Mary River Project Certificate³ as part of their “*Production Increase Proposal Renewal*” (PIP Renewal) to continue trucking and shipping of 6.0 Mtpa of iron ore from the Mine Site to Milne Port using the continued transportation and shipping corridors until December 31, 2022. The responsible Ministers varied three (3) terms and conditions and added five (5) additional terms and conditions. In November 2022, the NIRB issued Project Certificate 005 Amendment No. 04.

² Baffinland letter to the NIRB regarding their Extension Request to the Production Increase Proposal (NIRB Doc ID: 327657)

³ Baffinland letter to the NIRB regarding their Extension Request to the Production Increase Proposal (NIRB Doc ID: 327657)

2.2.6 SUSTAINING OPERATIONS PROPOSAL (AMENDMENT NO. 05)

In March 2023 Baffinland submitted their “*Sustaining Operations Proposal*” (SOP) a proposed amendment to continue the trucking and shipping of up to 6.0 Mtpa of iron ore using the Northern Transportation Route until December 31, 2024. In addition, the proposal included modifying the shipping rate to allow for greater “operational flexibility” to remove an additional 0.9 Mtpa of stranded ore that remained from the previous year due to extenuating circumstances.⁴ Following the Board’s reconsideration process, the NIRB issued Project Certificate No. 005 Amendment No. 05 in November 2023.

2.2.7 PHASE 2 DEVELOPMENT PROPOSAL

On May 13, 2022, the Board issued their Reconsideration Report and Recommendations to the Minister of Northern Affairs. The Board concluded that the Phase 2 Development Proposal has the potential to result in significant adverse ecosystemic effects on marine mammals, fish, caribou and other terrestrial wildlife along with vegetation and freshwater ecosystems which could lead to adverse socio-economic effects on Inuit. The Board further expressed that the proposal poses the potential for transboundary effects on marine mammals, fish, and the marine environment generally. As a result of these findings, the Board remained concerned that these adverse effects would not be able to be mitigated through adaptive management and monitoring programs and consequently recommended that the Proposal should not be allowed to proceed as this time. In November 2022, the responsible Ministers issued correspondence to the NIRB accepting the Board’s recommendation that the *Phase 2 Development Proposal* should not be allowed to proceed at this time.

2.3 Active Assessments in the 2023-2024 Monitoring Period

Sustaining Operations Proposal 2

On March 14, 2024 and April 8, 2024, Baffinland requested that the NIRB reconsider Terms and Conditions 179(a) and (b) of Project Certificate No. 005 for the “*Sustaining Operations Proposal 2*” (SOP2) application. At the time, the ore transportation and shipping limit was up to 6.0 Mtpa year plus operational flexibility (of up to 0.9 Mtpa of “stranded ore”) until December 31, 2024. Baffinland requested to continue the 6.0 Mtpa maximum allowable transportation shipping rates limits through the Northern Transportation Corridor until the end of 2032 unless the Steensby Port and Rail become operational prior to that date. Further, Baffinland also requested to continue using the 0.9 Mtpa “Stranded Ore Contingency Allowance” as approved under the SOP on October 17, 2023⁵ until 2032 or until shipping the Steensby Port begins. The justification for the Proposal was to allow the Project to sustain operations and delivery of iron ore to its customers while it secured investment and construct the Steensby Port and Rail, and to ensure the Project continues to provide the socio-economic benefits to the Region that had been realized with the 6.0 Mtpa operation.

⁴ During the Community Roundtable conduction in Pond Inlet on August 1-2, 2023, Baffinland committed to limiting the excess shipment of ore to 0.9 Mtpa, resulting in shipping no more than 6.9 Mtpa in 2023 and 2024.

⁵ The Ministers’ Response to NIRB’s Reconsideration Report and Recommendations Regarding Baffinland’s Sustaining Operations Proposal (Doc ID. 347422 & 347500)

On October 3, 2024, the NIRB received correspondence from Baffinland requesting to suspend the NIRB's assessment of the SOP2 Proposal and on October 29, 2024, the NIRB notified the Responsible minister that the assessment had been suspended.

Complete documentation associated with the original Mary River Project and associated Amendments and Proposals is available online from the NIRB's Public Registry using the following links:

- The Mary River Project: www.nirb.ca/project/123910
- The Early Revenue Phase: www.nirb.ca/project/124700
- The Production Increase Proposal: www.nirb.ca/project/124702
- The Extension Request to the Production Increase Proposal: www.nirb.ca/project/124703
- The Production increase Proposal Renewal: www.nirb.ca/project/125710
- The Sustaining Operations Proposal: www.nirb.ca/project/125767
- The Phase 2 Development Proposal: www.nirb.ca/project/124701
- The Sustaining Operations Proposal 2: www.nirb.ca/project/124893

3.0 MONITORING ACTIVITIES

3.1 Proponent's Responses to the Board's 2022-2023 Recommendations

On January 16, 2024 the NIRB released its 2022-2023 Annual Monitoring Report noting that while the Board had no specific recommendations for the 2022-2023 monitoring year, it documented several recurring and ongoing observations of focus through the Monitoring Program including: dust production and mitigation, functionality of the working groups, and marine mammal population dynamics all of which were extensively discussed throughout the reconsideration processes in recent years. Further, through past responses to Board Recommendations and reconsideration processes, Baffinland made commitments related to many topics including the following:

- Community involvement in monitoring;
- Conducting performance audits;
- Engagement of working groups in monitoring program development;
- Supporting the search for a third-party chair in the working groups to help settle disagreements;
- Working on updated Terms of Reference for the groups;
- Working with a third-party Dust Audit Committee and acting on recommendations;
- Researching, trialing, and implementing novel dust suppression techniques;
- Grass-roots involvement of community members in development and execution of monitoring to increase support for programs; and
- Supporting the development, selection of, and implementation of a third-party Project Monitor with the Qikiqtani Inuit Association (QIA) and the Government of Canada.

In the NIRB's 2022-2023 Monitoring Report, NIRB Monitoring Officer's provided several findings from the monitoring and Baffinland provided a response to these findings on March 20, 2024. These have been summarized in [Table 3-1](#).

Table 3-1: 2023 Monitoring Officer Findings and Baffinland's Responses

#	MONITORING FINDINGS	BAFFINLAND'S RESPONSES
1	NIRB reminded the Proponent to provide reporting updates on items 5-12 in the Board's General Regulatory and Administrative Responsibilities as outline in Section 4.1 of the Project Certificate.	Baffinland has provided the required information in their 2023 Annual Report.
2	A general reminder was provided to Baffinland to review tables and figures to ensure data is presented in a clear and concise manner allowing reviewers and the public to easily understand the work and results.	The <i>2023 Annual Report</i> appears to include tables and figures in a clear and concise manner. However, improvements can be made to ensure data is presented in a clear manner for the public to understand.
3	NIRB expects to see the completion of the Working Group Terms of Reference (TOR) as well as the implementation of the third-party chairperson to help with facilitation of the meeting and decision making versus recommendations provided by the group.	Baffinland noted that the last <i>draft</i> TOR for the Marine Environment Working Group (MEWG) was circulated to the working group in April 2023 with comments received on May 5, 2023. The most recent revised draft is still under internal review and will be finalized following final comments from the working group members and provided to the NIRB by early Q2 of 2024
4	Provide an update on the ongoing mitigation options being studied for dust suppressants and active air quality sampling.	<ol style="list-style-type: none"> 1) Specific actions taken in 2023 include trials of a dust suppression product at the Crusher and on the Tote Road. 2) Results from the pilot study comparing the 0.5 m dustfall canister data to the standard 2.0 m canister data concluded that there was no significant difference between sampling results and based on these results, Baffinland are discontinuing the 0.5 metres (m) pilot and continuing with the industry standard height given the results of the pilot.
5	Terms and conditions 146, 152, 160 and 161 have been listed as "deficient, in-progress"; however, the NIRB noted that these terms and conditions require the involvement of several other parties including the QIA and the Government of Nunavut (GN). While the rating remains deficient, it's important to acknowledge the efforts that Baffinland has made in achieving compliance here; however, there remains additional work and reporting from other parties in order to achieve compliance.	Following review of the <i>2023 Annual Report</i> , the rating remains deficient for these terms and conditions, it's important to acknowledge the efforts that Baffinland has made in achieving compliance here; however, there remains additional work and reporting from other parties in order to achieve compliance.

#	MONITORING FINDINGS	BAFFINLAND'S RESPONSES
6	Baffinland to provide a summary table on the follow-up analysis and updates to specific inquiries as part of Baffinland's response to Parties comments on the 2022 Annual Report. Suggested a summary table be provided to the Board within 60 days of issuance of the Monitoring Report.	Baffinland provided a summary table with updates to parties' requests through the 2022-2023 Annual Report comment period; however, noted that many of the parties' comments and requests will be addressed in the <i>2023 Annual Report</i> to the NIRB or the 2023 QIA-NWB Report on Operations.
7	The NIRB noted that aerial surveys of the caribou population near the Project were completed in March 2023 and requested the results of the surveys be provided as soon as practicable so that it can be incorporated into future monitoring efforts and see how it relates to Inuit Observations.	Baffinland highlighted the considerable efforts made to expand caribou monitoring in 2023, including completion of a caribou aerial survey (not conducted at the Project since 2012). Based on outcomes of this survey, Baffinland engaged with the GN for potential development of a caribou collaring and caribou tissue sampling program on Northern Baffin Island.

3.2 General Reporting Requirements

Baffinland provided the 2023 Annual Report for the Mary River Project (*2023 Annual Report*) to the NIRB on May 3, 2024. The *2023 Annual Report* summarizes the Project activities and stakeholder consultation undertaken in 2023, monitoring results, a summary of reportable spills, and the Proponent's self-assessment of compliance with the Project Certificate. The *2023 Annual Report* also includes the updated management plans listed in [Table 3-2](#). See Baffinland's *2023 Annual Report* for a complete list of management plans in use.

Table 3-2: Management and Monitoring Plans.

PLAN	VERSION	NIRB DOC IDS:
Phase 1 Waste Rock Management Plan	4.1	349809-349813
Waste Management Plan	10	349821
Fresh Water Supply, Sewage and Wastewater Management Plan	11	349858-349861
Aquatic Effects Management Plan	2	349814
Oil Pollution Emergency Plan – Milne Inlet	10	349815
Oil Pollution Prevention Plan	3	349816
Sampling Program – Quality Assurance and Quality Control Plan	7	349817
Snow Management Plan	7	349818
Hazardous Materials and Hazardous Waste Management Plan	7	349819

3.3 Monitoring by Regulatory Authorities

On May 9, 2024, the NIRB requested that the Regulatory Authorities with jurisdiction and/or area of expertise for the Mary River Project review the Proponent's *2023 Annual Report* and provide comments with respect to the following list. An extension request to provide comments was

granted on May 22, 2024. On or before July 4, 2024 the NIRB received comments from parties as outline in [Table 3-3](#).

Compliance Monitoring:

- Identify the terms and conditions from the Project Certificate which have been incorporated into any permits, certificates, licences, or other approvals issued for the Project, where applicable and report annually to the NIRB on the status of those incorporated terms and conditions;
- A summary of any inspections conducted during the 2023 reporting period, and the results of these inspections; and
- A summary of the Proponent’s compliance status regarding authorizations that have been issued for the Project.

Effects Monitoring:

- Whether the conclusions reached by Baffinland Nunavut in the 2023 Annual Report are valid; and
- Any areas of significance requiring further supporting information or any changes to the monitoring program which may be required.

Table 3-3: Comment Submissions on the 2023 Annual Report.

COMMENTING PARTY	NIRB Doc ID
Qikiqtani Inuit Association	350644
Government of Nunavut	350662
Crown-Indigenous Relations and Northern Affairs Canada	350661
Environment and Climate Change Canada	350648
Fisheries and Oceans Canada	350677
Health Canada	350643
Parks Canada	350678
Transport Canada	350645
Oceans North	350642

3.3.1 COMPLIANCE MONITORING

3.3.1.1 Crown-Indigenous Relations and Northern Affairs Canada

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) has issued three (3) land use permits (N2019Q001, N2019J0010 and N2019C0009) and one (1) surface lease (O45H16001) for the Mary River Project.

CIRNAC noted that the Nunavut Water Board (NWB) ensures that Project Certificate terms and conditions are incorporated in water licences, and CIRNAC is responsible for inspecting and enforcing any terms and conditions contained within any water licence associated with the project. CIRNAC provided a table outlining how specific terms and conditions have been incorporated into the water licence. CIRNAC completed three (3) sites inspections in 2023 (January, July and September) to review compliance with the Type ‘A’ Water License (2AM-MRY1325) and Type

‘B’ Water License (2BE-MRY1421) associated with the Mary River Project. The inspector(s) noted concerns of non-compliance during the visits with water licence related to waste management, spill prevention and management, status of the berms, and conditions of secondary containments. Following receipt of the inspection reports, Baffinland provided updates and confirmation that actions were taken to remedy the non-compliance.

3.3.1.2 Environment and Climate Change Canada

Environment and Climate Change Canada (ECCC) noted that no authorization had been issued but the Mary River Project is captured under several pieces of ECCC’s legislation. The Mary River Project is subject to the *Metal and Diamond Mining Effluent Regulations* (MDMER) with the MDMER required reports submitted to ECCC on a regular basis. ECCC conducted site inspections July and October 2023 to verify compliance under the several pieces of ECCC’s legislations. MDMER chemistry and toxicity sampling were not conducted during the October inspection as all effluent discharges were stopped from all final discharge points at the time of the inspection. No non-compliance was determined from the October inspection. The ECCC Enforcement Officer determined non-compliance during the review of the third quarter report submission with two (2) warning letters issued.

3.3.1.3 Fisheries and Oceans Canada

Fisheries and Oceans Canada (DFO) did not indicate whether or not site visits or compliance inspections were conducted in 2023. DFO noted that the Proponent currently operates under three (3) *Fisheries Act* Authorizations (FAA) for Milne Inlet Tote Road (06-HCAA-CA7-00084 and 24-HCAA-00054), Milne Inlet Ore Dock and Milne Inlet Freight Dock (amended to include the offsetting; 18-HCAA-00160 and 23-HCAA-00430). DFO confirmed that the following Terms and Conditions: 87, 105, 109, 110, and 121 from Project Certificate No. 005 and subsequent amendments for the Mary River Project are incorporated into DFO’s FAA for the Milne Inlet Ore Dock. Other terms and conditions, while not directly incorporated, do fall under DFO’s mandate, and overlap with conditions in Baffinland’s existing FAA as follows:

- Milne Inlet Tote Road: Terms and Conditions 19, 26, 45, 47, 48(a);
- Milne Inlet Ore Dock: Terms and Conditions 45, 76, 88, 99, 101, 106, 113, 115, 123; and
- Milne Inlet Freight Dock: Terms and Conditions 14(a), 45, 76, 88, 99, 101, 113, 115, 123, 128.

The FAA for the Milne Inlet Freight Dock require Baffinland to create 2729 habitat equivalent units of fish habitat to offset for the destruction of 2170 habitat equivalent units of fish habitat from the freight dock construction. The freight dock and offsetting is currently in monitoring phase and DFO plans to conduct a site visit in the summer 2024.

In 2022, DFO issued a *Corrective Measures Order* under the *Fisheries Act*, requiring Baffinland to submit a targeted *Sediment and Erosion Control Plan* and a *Permanent Crossing Plan* for the Milne Inlet Tote Road. Only a *Sediment and Erosion Control Plan* was submitted by Baffinland in 2023. DFO noted that Baffinland is working with DFO through 2024 and has remediated 7 of 20 crossings identified in the *Corrective Measures Order*. DFO plans to conduct compliance visits in the summer of 2024.

3.3.1.4 Transport Canada

Transport Canada (TC) noted the following compliance monitoring:

- *Oil Handling Facility:*
 - Inspection carried out in 2023 along with inspection of four (4) vessels
 - In compliance with regulatory requirements as per the *Canada Shipping Act, 2001* and with the Marine Transportation Security Regulations
 - No enforcement activity undertaken or required
- *Marine Safety Vessel Inspection*
 - Inspected nine (9) vessels in 2023 and conducted ballast water inspections
 - No issues found during inspection and no enforcement actions undertaken
- *Canada Navigable Waters Act*
 - Inspected all crossings on the Tote Road and proposed railway to Steensby Port
 - No issues found during inspection and no enforcement actions undertaken

Agency inspection and site visits

Baffinland noted that it hosted numerous inspections and audits from CIRNAC, QIA, and NIRB, as well as the Workers' Safety & Compensation Commission (WSCC) Mines Inspector, and inspectors from Environment and Climate Change Canada (ECCC), Fisheries and Oceans Canada (DFO), and Transport Canada Navigable Water Protection. Baffinland noted that it responded to any concerns identified in the inspections and audits to provide additional information and/or address the identified concerns.

Some concerns that were identified by agencies following site visits include:

1. ECCC issued a warning letter to Baffinland for exceeding the grab sample limit for total suspended solids at MS-08 on September 3, 2023 and the monthly mean concentration for September 2023.
2. DFO issued a Letter of Advice for Baffinland's Tote Road Culvert Remediation proposal to implement a permanent crossing solution for ten (10) corrugated steel pipe (CSP) crossings along the Tote Road. Tote Road Culvert Upgrades work under the Type 'A' Water Licence commenced in early 2024.
3. Deficiencies were identified during the general inspections by WSCC, with the majority of the directives completed during the inspection and the remainder completed within a timely manner shortly thereafter and before the requested completion dates.
4. Twenty (20) spills were reported to the Northwest Territories-Nunavut (NT-NU) Spill Report Line, CIRNAC and QIA by the Project in 2023 with detailed follow-up reports submitted within thirty (30) days of each reported spill.

3.3.2 EFFECTS MONITORING

The tables below contain a summary of comments received by parties and Baffinland's responses with respect to effects monitoring. For the complete set of comments and responses, by the NIRB for the file, please refer to [Table 3-3](#) for Public Registry information.

Table 3-4: Qikiqtani Inuit Association's Comments and Baffinland's Response for the 2023 Annual Report for the Mary River Project.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
General – #1	Revise Appendix G.2.6 to remove reference to site culvert crossing (CV)-001 while discussing sites CV-021 and CV-030.	Confirmed that it is an administrative error and will update in future reports.
General – #2	Revise Appendix G.2.6 to remove reference to site CV-102 while discussing sites CV-104.	Confirmed that it is an administrative error and will update in future reports.
General – #3	Replace figures in the Snow Management Plan with higher-resolution figures.	Figures have been reduced to submit electronically.
Dust and Dustfall Monitoring – #1	Project continues to result in a large amount of dustfall and deposition has continued to exceed FEIS predictions. QIA requested Baffinland provide further justification for extrapolating summer dustfall monitoring data to the rest of the year.	Dustfall monitoring for stations greater than 1 km away from Project infrastructure are not visited during the winter months. Winter predictions for these sites are estimated using a modelling approach developed to extrapolate winter dustfall predictions. Winter dustfall predictions are not made from summer dustfall data. This methodology was shared in a memo and accepted by the QIA.
Dust and Dustfall Monitoring – #2	<ol style="list-style-type: none"> 1. Clarify if the implementation of recommendations from the 2023 Dust Audit Report are anticipated to return dustfall to FEIS predictions. 2. Clarify whether the follow-up report from the Dust Audit Committee will be used to inform dust mitigations in 2024. 3. Discuss how the results of the Dust Audit outcomes will be used to inform the Dust Monitoring Program and whether updates to the Dust Monitoring Program are needed based on the Dust Audit results. 	Noted that implementation of recommendations from the 2023 Dust Audit Report will help decrease project-related dustfall but it cannot be predicted if dustfall is anticipated to return to FEIS predictions.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Dust and Dustfall Monitoring – #3	Provide information needed on how much calcium chloride will be applied annually, and on the effects this change may have on the terrestrial and aquatic receiving environments.	The combination of calcium chloride and DUST/BLOKR® yielded improved results and reduced the need for excessive use of water as a dust suppressant. Due to conservative application rate, Baffinland does not anticipate changes to the terrestrial or aquatic receiving environments.
Dust and Dustfall Monitoring – #4	Implement additional precautionary dust and sediment mitigation measures to prevent potential threshold exceedances and undertake studies to validate sediment thresholds for aquatic char egg survival.	Baffinland contends that because sedimentation has been well below published thresholds and below FEIS predictions, studies to validate sediment thresholds for arctic char survival are currently not warranted.
Dust and Dustfall Monitoring – #5	Provide an update on the results of the pilot project to inform discussion for the design of a Tote Road monitoring program to assess potential Project-related impacts on aquatic conditions within the Phillips Creek watershed based on the establishment of long-term monitoring stations. Include plans for the 2024 study of Project generated dust and sediment effects on the ecology of Tote Road streams.	Results of the 2023 pilot investigation indicated no statistically significant difference in the weight of sediment collected between downstream and upstream locations, essentially indicating that the Tote Road did not contribute significant amounts of sediment to the creek. Sediment monitoring program trial is planned to continue in 2024 with a similar approach to the 2023 year.
Dust and Dustfall Monitoring – #6	Provide a copy of the evaluation of the efficacy of calcium chloride and DUST/BLOKR® and trial methods and results of DusTreat at the crusher and ore stockpiles.	Will provide the requested details following completion of the trials.
Dust and Dustfall Monitoring – #7	Confirm whether tests for collinearity of variables were used in Baffinland's mixed effects models.	The mixed effects models did not include distance from the mine site and road as variables, therefore no collinearity of variables were tested.
Dust and Dustfall Monitoring – #8	Include a comparison to both the FEIS predictions and the updated dustfall model as part of the 2024 Terrestrial Environment Annual Monitoring Report (TEAMR).	The 2024 dustfall data will be discussed in comparison with the FEIS predictions and updated modelling in the <i>Sustaining Operations Proposal 2</i> document.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Dust and Dustfall Monitoring – #9	<ol style="list-style-type: none"> 1. Continue to monitor lichen-metal concentrations more frequently than currently scheduled, so that that suitable responses can be undertaken if thresholds are exceeded. 2. Commit to meet with the QIA to resolve outstanding issues related to the isopleth modelling and to discuss proposed responses to threshold exceedances for dustfall before September 2024. 3. Provide a review of operational and infrastructure controls that can be implemented throughout the ore handling chain to minimize dustfall. 	Noted that as defined in the TEMMP, Baffinland has either met or exceeded the prescribed monitoring frequency for these components. Baffinland noted that it will continue to work with QIA and discuss QIA's requests.
Dust and Dustfall Monitoring – #10	For future reporting on satellite imagery analysis, specific classes should be used which will make it easier for comparison to FEIS predictions and increase the utility of satellite imagery analyses.	Provided the dustfall concentration classes which will be used in the 2024 reporting for easier comparison with the FEIS predictions.
Dust and Dustfall Monitoring – #11	Commit to undertaking improvements to satellite imagery analyses which will be undertaken in future years to achieve better correlation between the dustfall sampling and satellite imagery analyses monitoring programs.	Baffinland has incorporated surface snow sampling for satellite ground truthing into its program, with 2024 being the third year of data collection. Surface snow sampling during image acquisition is intended to provide a more direct comparison since they are both capturing what is on the ground. No significant relationship has been identified as of the 2023 TEAMR.
Dust and Dustfall Monitoring – #12	Provide details for the proposed early notification methods to identify increasing dust levels on the Tote Road.	Baffinland staff involved in this notification system are Ore Haul Drivers, Ore Haul dispatchers and Road Maintenance supervisors. Baffinland noted that the primary metric involved in the notification is visible dust.
Dust and Dustfall Monitoring – #13	<ol style="list-style-type: none"> 1. Update wording to accurately reflect the work that has been completed related to identifying high risk conditions for dust dispersion. 2. Provide details related to the program for identifying conditions with high risk for dust dispersion. 	Much of the requested information is still in development. Baffinland noted that it is important to control dust during all environmental conditions and continues to focus efforts on development of suitable, reliable and consistent monitoring processes as well as mitigation methodologies in a unique Arctic environment.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Meteorology and Climate – #1	Provide rationale on whether any accommodation for climate change has been incorporated into thermal model.	A thermal model to predict the impact of climate change on the depth of ground subject to seasonal freezing and thawing (active zone) at the waste rock facility (WRF) is currently being developed.
Meteorology and Climate – #2	Provide a discussion on the potential impacts of climate change on the project and the integrity of the environment; and discuss any mitigative and adaptive management measures that will be implemented for the project that are influenced by climate change to manage environmental impacts.	Baffinland noted that it is understood that climate change may result in potential impacts to the environment such as increased active layer thickness and permafrost degradation. The consideration of climate change impacts in this document remain broadly applicable to the Project, regardless of the Phase 2 Proposal not proceeding, and has accordingly been included as part of the SOP2 FEIS Addendum.
Water Quality – #1	Recommended Baffinland include discussion in the annual report on chlorophyll-a samples that are approaching the Aquatic Effects Monitoring Plan (AEMP) benchmark. The discussion should include potential reasons for the elevated results, any follow-up investigations that are being considered, and sites that are trending upward should be flagged for future monitoring.	Noted that it provided discussion on chlorophyll-a concentrations that were higher and conducted benthic invertebrate community monitoring which showed no adverse effect on the benthic invertebrate community. The analyses have not indicated an upward trend, nor suggested a mine-related cause for the occasional higher concentrations of chlorophyll-a. As such, no changes to the existing AEMP framework will be conducted.
Water Quality – #2	Requested information on what statistical analysis or criteria were used to assess the data for outliers for chlorophyll-a concentrations at station Sheardown Lake Tributary (SDLT)-12.	The analysis of the SDLT-12 chlorophyll-a concentration data relative to the reference creek and historical data were based on qualitative assessment of available data. The relative high concentration at SDLT-12 in the spring of 2023 could be an error resulting from sample handling or natural variation. Additional monitoring will confirm the validity of the assumption(s).
Water Quality – #3	Correct text for Figure 4.8, Appendix G.4.1 to accurately reflect the seasonal differences in chlorophyll-a concentrations at DLO-2.	Baffinland acknowledged the error and noted that chlorophyll-a concentrations in winter were significantly lower than concentrations in summer which is an expected trend in lakes in the area.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Water Quality – #4	Describe how shallow groundwater may interact with potentially acid-generating (PAG) waste rock in the WRF to increase confidence that there are no environmental or migrating impacts.	Baffinland provided a description of the WRF development strategy outlined in the Phase 1 WRMP.
Water Quality – #5	Provide an action plan and timeline for the installation of new wells to replace the incorrectly-installed wells from 2023 and the 2022 standpipes installed in reworked material. A schedule should be provided for implementing the recommendations by Knight Piesold Consulting on the future groundwater monitoring program.	New 2-inch PVC wells will be installed in 2024 in the areas identified as information gaps in the groundwater assessment; with current non-functional wells scheduled to be replaced with drill-installed 2-inch PVC. A total of 12 to 14 wells are scheduled to be installed in August 2024.
Water Quality – #6	<ol style="list-style-type: none"> 1. Provide an action plan to improve QA/QC practices during groundwater sampling, to ensure that the 2024 groundwater monitoring program is successful. 2. Conduct bi-annual groundwater monitoring in future programs, to bolster the dataset, should concerns occur during a single monitoring event that would render the data unusable. 	<ol style="list-style-type: none"> 1. Committed to ensuring all samples collected in 2024 following Baffinland's robust Sampling Program – Quality Assurance and Quality Control Plan. 2. Bi-annual groundwater monitoring is not viable as the active layer is only available for sampling for a very limited time annually.
Water Quality – #7	Include baseline data and an interpretation of historical groundwater quality trends in the License Application, and during the 2024 Groundwater Monitoring Program.	Groundwater was not a constituent of concern in high arctic permafrost conditions in the mining industry, thus no data was collected prior to 2017 and does not form part of the baseline data.
Water Quality – #8	Provide documentation to demonstrate that all water balance objectives have been completed, and ensure future iterations of the water balance continue to address all stated objectives.	Baffinland provided a summary of what was completed but no documentation.
Water Quality – #9	Update the AEMP and Core Receiving Environment Monitoring Program (CREMP) Trigger Action Response Plans to detail how the sites and parameters without any baseline are evaluated and managed. If Baffinland does not believe the reference sites are representing natural localized changes in chemistry than information should be provided on why the sites are still used.	Baffinland will discuss the concerns with QIA during the review process of revision 2 of the AEMP.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Water Quality – #10	Update the effects determination of the CREMP to remove the requirement to have parameter concentrations to be elevated consistently at mine-exposed areas and to complete seasonal trend analysis.	Provided updated wording and noted that seasonality has been recognized by Baffinland in the determination of mine-related effects. Baffinland also noted seasonal trend analyses may be completed under specific circumstances as outlined in the AEMP.
Water Quality – #11	Incorporate baseline concentrations into temporal trend analysis completed as part of the 2022 CREMP and moving forward for all temporal trend analysis completed.	Noted that baseline concentrations have been included in temporal trend analyses with the analyses completed for the period of 2015 to 2022 and incorporated into the 2022 CREMP report.
Water Quality – #12	Follow-up with the appropriate AEMP Trigger Action Response Plan (TARP) actions when the objective thresholds have been met.	Baffinland contended that the source of 2023 aluminum to the CLT1 upper main stem did not reflect a mine related source and the 2023 phosphorus concentrations at CLT2 appear to be an anomaly and are not consistent with mine related influence. Further, the TARP actions are outlined in the draft AEMP rev. 2 and were not applied as part of the 2023 CREMP.
Water Quality – #13	Provide baseline values for in situ parameters for all tributary and lake sites and compare current values to baseline values as required by the AEMP TARP.	Parameters of water temperature, dissolved oxygen, pH, and conductivity/specific conductance that are measured in situ do not have AEMP benchmarks and current revisions of the AEMP does not include a requirement to compare annual measures of in situ parameters to baseline data.
Water Quality – #14	Provide data to support the theory that boron concentrations in Camp Lake are higher during operation than baseline due to analytical changes at the laboratory.	Baffinland noted that the laboratory used for sediment quality analysis changed between the baseline and mine operation period studies and many of the data prior to 2015 was higher compared to the operational years including the reference lakes.
Water Quality – #15	All mine exposed sites should be compared to baseline conductivity values, and if conductivity is higher than both the reference sites and baseline values, temporal trend analysis should be completed. Potential sources (e.g., dust suppressants) of the elevated conductivity should be discussed.	In-site specific conductance does not have an established AEMP benchmark. Baffinland further noted that they have consistently conducted spatial analysis of specific conductance between mine-exposed and reference areas since 2015 CREMP.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Water Quality – #16	<ol style="list-style-type: none"> 1. Baffinland to provide flow information for each season and for each study (2023 and all baseline studies), to support the hypothesis that greater turbidity observed in all 2023 seasons at SDLT-1 reflects natural conditions. 2. Complete temporal trend analysis for copper at Sheardown Lake sites given that concentrations exceeded the AEMP benchmark in 2023. 	<ol style="list-style-type: none"> 1. Noted that the hydrometric station in CLT1 has been used since 2014 to provide a comparison of general flow conditions from year to year. No additional studies were provided. 2. Copper concentrations were above the AEMP benchmark in summer and fall of 2023, so were the reference concentrations. Concentrations of copper at SDLT-1 have frequently exceeded the AEMP benchmark, including almost all samples collected during the baseline period.
Water Quality – #17	Complete the tasks associated with the high-level risks for total cadmium in SDLT-1.	All analyses and effects assessments in the 2023 CREMP followed the methods and response framework from revision 1 of the AEMP; revision 2 has not been approved yet. Baffinland concluded that a moderate action response was required for cadmium at SDLT-1. Despite elevated cadmium concentrations, no biological effects were associated with the elevated concentrations.
Water Quality – #18	Establish quantitative targets to indicate when mitigation measures for nitrate and sulphate in Mary River Tributary-F (MRTF) are required.	Baffinland contends that quantitative targets used for the purpose of triggering mitigation measures related to nitrate or sulphate concentrations at MRTF are not required and provided several supporting points.
Water Quality – #19	Include information from the Surface Water and Aquatic Ecosystem Management Plan (SWAEMP) on the monitoring triggers and mitigative responses for snow stockpiling from project areas, for ease of review. Ensure that the Snow Management Plan is a comprehensive document that contains all information for monitoring and managing stockpile meltwater.	The Snow Management Plan provides instruction to employees in order to complete inspections, clean up, and runoff monitoring to ensure the release of sediment and other contaminants are captured and taken care of properly. Baffinland noted that it will update the Snow Management Plan during the annual review of the plan.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Water Quality – #20	Provide the rationale for positioning snow stockpiles in upgradient areas near Camp Lake and Sheardown Lake, where contaminant/sediment-laden meltwater may preferentially flow downgradient to the lakes and may be difficult to contain and mitigate.	Locations of snow stockpiles are reviewed every year and are selected based on accessibility, suitability of the area, safe access, and potential for impacts to the receiving environment. Baffinland will continue to assess the suitability of locations of proposed new snow stockpiles, and inspect and monitor snow stockpile locations.
Water Quality – #21	Initiate sediment and water quality studies related to the development of the Steensby Railway and Port to update the existing baseline characterization.	The 2024 Steensby Baseline Studies Summary provides a summary of baseline studies undertaken for the Steensby Component from 2021 to the present, and those planned for 2024 and 2025.
Water Quality – #22	Clarify if the Canadian arctic lakes used to qualify the annual rates of sediment accumulation are natural lakes or those that have been impacted by mines or a combination of the two.	Study lakes have had little to no industrial or human activities within the drainage areas.
Water Quality – #23	Discuss the implications of the increase in sediment accumulation over the mine operation period in Sheardown Lake NW, particularly in the silt-loam substrate, to the benthic invertebrate community and the impacts to arctic char (through the food-web).	The benthic invertebrate community at Sheardown Lake NW have been assessed since 2015 under the CREMP and in the most recent 2023 CREMP study, no adverse effects on benthic invertebrates were indicated at littoral or profundal depositional habitat of Sheardown Lake NW mirroring similar results in previous years of mine operation. For key indicators of benthic invertebrate density, richness, and evenness, values have been higher at Sheardown Lake NW than at a reference lake since 2015.
Water Quality – #24	<ol style="list-style-type: none"> 1. Discuss the result of any work that has been completed to delineate non-compliant effluent discharges and assess potential impacts to the receiving environment. 2. Discuss the results of any work that has been completed to characterize the quantity and composition of seepage being released at the KM 105 water management pond. 	In 2023, all effluent discharge were compliant with the applicable discharge criteria with the exception of four (4). Discharge volumes of seepage from the KM 105 pond were provided in monthly water licence reports. Water quality results characterizing the seepage at KM 105 are included in monthly water licence reports and in the 2023 QIA-NWB Annual Report for Operations.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Water Quality – #25	<ol style="list-style-type: none"> 1. Comment on whether updates to the sediment and erosion management plan may be needed to mitigate potential impacts to the environment from the sediment and erosion control issues that have been identified at the Mine. 2. Discuss the potential environmental impacts that may have occurred prior to issuance of the DFO directive and may occur during the interim while the erosion and control plan is being developed. 3. Discuss any mitigation measures that will be implemented to prevent adverse impacts to the environment during the interim while the erosion and control plan is being developed. 	The management of erosion and sediment controls has been improved through the work of the International Erosion Control Association, with changes to several federal regulations in 2021, with increased focus on sediment and erosion control standardization. The implementation of controls from Baffinland's Management Plans, including the SWAEMP, are sufficient to prevent and mitigate adverse impacts and any updated control methodologies that can be implemented will be taken as required in conjunction with updates to the management plans.
Water Quality – #26	Sample the newly implemented Capesize monitoring stations for effects on sediment and benthic invertebrates from 2024 to 2026.	Baffinland confirms that the sampling for Marine Environmental Effects Monitoring Plan (MEEMP) began in 2023. This was confirmed at the MEWG meeting in December 2023 and again in June 2024 with QIA in attendance.
Water Quality – #27	Provide a log of learned information/strategies for waste rock deposition both in line with the Waste Rock Management Plan (WRMP) and when deviations have occurred, that have evolved over the course of mine operations, and waste placement records to-date. Also, provide the current WRF capacity and an estimate of when the footprint will require expansion.	Waste placement records and a conformity assessment to the waste rock deposition guidelines outlined in the PH1 WRMP were included in the 2023 QIA- NWB Annual Report for Operations; and a list of earlier guidelines are provided in previous PH1 WRMPs.
Water Quality – #28	In the WRMP, many thermistor beads measuring temperature and oxygen were reported to be damaged across several stations. Requested Baffinland provide a schedule for replacing or repairing the damaged thermistor beads.	The information was included in the 2023 QIA-NWB Annual Report for Operations and a similar WRF instrumentation update will be provided in the 2024 QIA-NWB Annual Report which will include instrumentation updates in future annual reports.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Water Quality – #29	Provide additional information regarding the circumstances/details surrounding the nine (9) month temperature increase observed at thermistor BH1 in the waste rock pile. Provide a detailed action plan to determine the specific mechanisms involved in causing the prolonged temperature increase to ensure this does not happen again in the future.	Previous thermal assessments completed in 2021 by Golder Associates provides details around the localized warming event that was measured at BH1 in July 2020, which notably remained well below the freezing point at all times.
Water Quality – #30	It was unclear what the basis for the assumptions are for sensitive analyses for misclassification of non-acid generating (0.5% and 5.0%) and requested that a rationale be provided to justify these values to provide confidence they represent an upper bound scenario for the misclassification of PAG rock as non-acid generating.	As described in the PH1 WRMP, the uncertainty when using <0.2 wt. % S and paste pH >6 as an analogue for NPR of >2 is approximately 0.5%, with 0.51% of samples being incorrectly categorized as non-AG. The 5.0% misclassification was chosen to represent an extreme scenario, which has not been observed during current monitoring of mining operations.
Water Quality – #31	Provide a protocol or rationale for determination of each of the performance indicators for low, medium and high-risk status as these were not indicated in TARP for the Water Balance Update and the WRF QA/QC Monitoring Plan	Thresholds were developed for each particular activity and objective based on Baffinland's understanding of the variability of the underlying performance indicators and the relevant operational considerations related to the various Project activities.
Water Quality – #32	Requested Baffinland remove professional judgement as part of the AEMP TARP and rely on objective thresholds to remove ambiguity in the adaptive management process.	Baffinland provided multiple approaches that may be considered or applied to data collected most recently in order to determine whether a change in environmental conditions has occurred. This ultimately requires professional judgement be used to ascertain such a change and Baffinland does not feel that removal of professional judgement is justifiable.
Water Quality – #33	Recommended the status of compliance for Term and Condition 16 be updated to "non-compliant" until such a time that seepage has been mitigated and controlled for all water infrastructure.	Disagrees with QIA's recommendation to change the status of compliance to "non-compliant". Construction of the KM105 Pond is consistent with those proposed in the FEIS and FEIS Addendum, and associated Type 'A' Water Licence, and which is consistent with the requirements of Term and Condition 16.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Terrestrial Environment – #1	<ol style="list-style-type: none"> 1. Provide details regarding the scope of the assessment that will be completed by the third-party consultant of the borrow sources and clarify whether this assessment will be a continuation of the work that was completed by Tetra Tech in 2014 and 2019. 2. Confirm whether assessments of borrow sources are to occur every five (5) years. 3. Describe how these assessments are intended to contribute towards minimizing impacts from the project activities and infrastructure on sensitive landforms. 	<ol style="list-style-type: none"> 1. The purpose of the current assessment is to update the assessment(s) previously completed by Tetra Tech and to support completing an update to the 2019 Tote Road Borrow Source Report. Therefore, it involve a similar scope of work to previous assessments. 2. Baffinland confirms that the third-party assessments are scheduled to occur every 5 years to ensure information remains relevant for current operations. 3. These assessments are completed to inform Baffinland on the status of borrow pits, and if the removal of material or the ponding of water is having any effects on local landforms due to permafrost degradation.
Terrestrial Environment – #2	QIA appreciates Baffinland's efforts to introduce greater clarity in the reporting of Snow Geese by separating data during and outside moulting season. No requests were made.	n/a
Terrestrial Environment – #3	<ol style="list-style-type: none"> 1. Additional efforts must be made to investigate the impact low-level flights are having on breeding migratory birds and moulting Snow Geese. 2. Requested Baffinland provide specific information and include the results of their investigative and corrective measures within the 2024 TEAMR. 	<ol style="list-style-type: none"> 1. Baffinland noted that all pilots who will be working at the Project, and all personnel who will be flying in a helicopter are required to review Baffinland's Helicopter Guidelines and to sign-off that they have read and understood the requirements. Results of the investigation will be discussed in the 2024 TEAMR. 2. Baffinland noted that investigation methods will be included in the 2025 TEAMR following consultation and review with a third-party subject matter expert.
Terrestrial Environment – #4	Provide mapping of the helicopter flights routes relative to walrus haulout locations in future annual reports.	Baffinland did not fly near any walrus haulouts, so a map was not created. For future annual reports, will provide mapping of the helicopter flight routes relative to walrus haulout locations.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Terrestrial Environment – #5	<p>No information provided on how information of observed concentrations of other migratory birds are documented by Baffinland and how this documentation would lead to eventual implementation of helicopter avoidance areas. Requested details on:</p> <ol style="list-style-type: none"> 1. The documentation process that Baffinland will follow. 2. The reporting and mitigation process that would follow this documentation. 	<ol style="list-style-type: none"> 1. If concentrations of migratory birds are observed, the area will be investigated to verify and delineate. Data and proposed locations will be submitted to TEWG members for comment. 2. Observations of concentrations of migratory birds within the Project area can be reported to Environment staff at site. Areas will then be assessed, and similar standards for current avoidance areas will be applied, if applicable.
Terrestrial Environment – #6	<p>Provide detailed explanations of the landscape and safety limitations that precluded snowbank height management in 2023. The explanations will include mapping showing the locations of non-compliance and future years of reporting will provide similar mapping of non-compliance areas for comparison. If chronic non-compliance is present, Baffinland should explore alternative approaches to improve compliance if the locations are important wildlife crossing areas.</p>	<p>When multiple safety concerns are identified that inhibits the ability of operators to feather the snow, the safest course of action is to wait until conditions improve and revisit the site(s) at a later date when safe conditions exist. Baffinland will review areas of important wildlife crossings to target snowbank management in line with the considerations provided.</p>
Terrestrial Environment – #7	<p>Provide a more specific reference to the TEMMP snowbank height monitoring and Roads Management Plan, or provide pertinent information about the specific mitigative actions taken if snowbanks on the Tote Road are found to disrupt wildlife migration.</p>	<p>Snowbanks along the Tote Road are 'feathered' (i.e. pushed back and redistributed) out into the tundra to minimize snowbank height to ensure impacts to wildlife are minimized. This is completed on an as-needed basis and as weather conditions allow.</p>

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Terrestrial Environment – #8	<ol style="list-style-type: none"> 1. Provide further details to explain how Baffinland determined the avian mortalities represents small proportions of the overall population, with reference to appropriate population estimates. 2. Provide a summary of the existing mitigations to prevent bird strikes on buildings and provide options for possible enhanced mitigations to reduce bird strikes. 	<ol style="list-style-type: none"> 1. Baffinland noted that based on population estimates for King Eider ducks in Canada (600,000 birds) and snow buntings (5 to 50 million adults), the mortalities represent 0.002% and 0.000% respectively. 2. The event which resulted in thirteen (13) King Eider mortalities as a result of contact with the ship loading structure at Milne Port was a unique event. High winds and blowing snow likely reduced visibility, resulting in the collisions. Baffinland reviewed documentation of wildlife interactions and found no previous mortalities at the ship loader. Should this event be repeated for this facility, additional mitigation measures will be considered in accordance with TEMMP.
Terrestrial Environment – #9	Noted difference between avian mortalities in the report; 17 versus 20. It was unclear which accurately reflected the mortalities and QIA requested Baffinland correct this.	Figure 11-1 will be updated to reflect Project –related mortalities.
Terrestrial Environment – #10	Requested Baffinland share the results of the caribou fecal pellets that were collected in 2011-2014 and 2020.	No analyses were conducted on the fecal pellets collected in 2011–2014 because the age of the pellets was unknown. No relevant information to the project effects was to be gained from an analysis of the 2020 fecal pellets.

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Terrestrial Environment – #11	Clarify whether or not staff follow the wildlife tracks until the tracks indicate the animal crossed the road, turned away from the road or for a specified distance (e.g. 1 km). QIA expects Baffinland staff would be undertaking these surveys to ensure all efforts are being made to document possible deflections through following tracks until they cross the road, are deflected or until 1 km of paralleling has been reached.	Baffinland confirmed that staff followed tracks to document animal patterns of movement (i.e. to identify whether animals deflected, travelled along, or crossed the road). Snow tracks observed along the Tote Road are followed on foot within a reasonable distance to document patterns of movement, animal behaviour, and habitat use (if/where possible). If tracks are seen travelling along the Tote Road for longer distances, generally >100m, the survey crew will follow the tracks in a light truck traveling at a speed of ~30 km/hr until the tracks either cross the road or veer off into the tundra.
Terrestrial Environment – #12	Provide more details on the safety reasons that led to helicopters being grounded, which impacted the completion of a second round of height of land (HOL) surveys. QIA also requested Baffinland plan for these possible eventualities in the future, so that a second round of surveys can be completed.	Baffinland noted that contingency planning for inclement weather is always accounted for when planning field programs. In this specific case, an aviation incident caused significant damage to one of the helicopters onsite resulted in the extended grounding of the entire fleet until a full investigation could be completed
Terrestrial Environment – #13	<ol style="list-style-type: none"> 1. Provide further details on the incidental observations of piping plovers as this was not provided in the <i>2023 Annual Report</i>. 2. Provide details of what measures were taken once piping plovers were identified to reduce potential disturbance of individuals and their habitat. 	Incidental observations are made by staff at site, including non-expert observers. There are inherent limitations to characterizing species, age, or sex of bird or wildlife groups or individuals. Upon review, the birds were unlikely piping plover because Mary River is completely outside of the range.
Terrestrial Environment – #14	Provide mapping of the location of caribou observations and details on groups sizes for the 2023 observations made, as well as previous years where possible. For future annual reports, record the approximate locations of wildlife observed as part of the incidental wildlife monitoring and include mapping of observations, and details of the different group sizes.	The incidental observation logs are intended to capture awareness of and general observations of wildlife by project personnel at the Project. Some observations are made well outside the terrestrial RSA (e.g., during travel to/from exploration areas). For caribou group sizes and observations, the 2023 aerial survey or other surveys specific to caribou should be reviewed to quantify the details requested by the QIA.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Terrestrial Environment – #15	<ol style="list-style-type: none"> 1. Requested future surveys be conducted to provide information on the current conditions of coastline nesting birds and to assess potential project effects as the last surveys were completed in 2012. 2. Continue cliff-nesting raptor surveys around the mine site, southern route and Steensby Port. 3. Continue peregrine falcon nesting surveys. 4. Continue roadside or railside waterfowl surveys. 	<ol style="list-style-type: none"> 1. Islet survey will be conducted before southern commercial shipping begins. 2. Cliff-nesting raptor surveys are unlikely to be re-instituted. 3. Peregrine falcon occupancy and productivity will not be continued along the Tote Road or Milne Port.
Terrestrial Environment – #16	Continue to monitor lichen-metal concentrations more frequently than currently scheduled, so if thresholds noted in the TEMMP are exceeded then suitable responses can be undertaken.	As per the TEMMP, both soil/vegetation base metals sampling and vegetation abundance monitoring are conducted per 3-5 year intervals; increasing the sampling frequency is not warranted. Also noted that the mean lichen-metals concentrations across Project areas and sample distances showed no significant changes from baseline values with low environmental and human health risk.
Terrestrial Environment – #17	<ol style="list-style-type: none"> 1. Suggested the use of Canadian facilities to conduct teeth aging of wildlife, including caribou. 2. Requested Baffinland provide similar compensation for the proposed on site caribou tissue sampling program to be on par with the GN and Northern Contaminants Programs. 	<ol style="list-style-type: none"> 1. Will consider the request. 2. Has consulted with the GN and industry specialist and is using the same methods, payment, and analysis as the GN program.
Terrestrial Environment – #18	Provide details of the planned timing of the development of the caribou surveillance program and operational protocols relative to the initiation of the Steensby railway operations. QIA expects at a minimum that Baffinland will provide the proposed surveillance program and operational protocols to the QIA and TEWG within two (2) years in advance of the operation of the railway for their review and comment.	Baffinland commits to providing the information as requested.

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Terrestrial Environment – #19	With the construction of the southern railway proposed to occur, QIA noted concern by the lack of progress made on estimating the available esker habitat within the regional study area (RSA) and project development area (PDA), and the development of a wolf indices for presence/abundance of wolves to set a baseline.	Baffinland will undertake the work to develop baseline information along the southern railway corridor and Steensby Port location, though there is a low abundance of wolves in the RSA.
Terrestrial Environment – #20	Provide the methodology for the proposed Autonomous Recording Units (ARUs) deployment for monitoring of red knot vocalization in advance of undertaking the program so that parties' comments and concerns can be addressed before the ARUs are deployed.	Baffinland welcomes discussion on this topic with the TEWG, particularly seeking input from the Canadian Wildlife Services (CWS) and their thoughts on the utility of this program and the likelihood/concern with finding red knots in the southern portion of the RSA
Terrestrial Environment – #21	To better understand how remote camera monitoring results provide insight on caribou avoidance of the project area, Baffinland is requested to report on and analyze the information as summarized.	Baffinland noted that QIA's comments or recommendations on the wildlife remote camera program have been discussed at length at several meetings. Information was provided again along with figures and tables on the viewshed analysis.
Terrestrial Environment – #22	To maximize remote camera monitoring data to provide insight on caribou avoidance of the project area, Baffinland is requested to implement measures to minimize field of view obstructions due to snow, ice, or fog. Further, information was requested on the number of times when each camera was checked and serviced.	Noted that QIA's comments or recommendations on the wildlife remote camera program have been discussed at length at several meetings. Baffinland indicated that weather-related obstruction of camera view field appears specific to only two (2) camera locations and represents a localized issue. Baffinland will also review the proposed mitigation to minimize the accumulation of fog and ice.
Terrestrial Environment – #23	Confirm whether or not the Mittimatalik Hunters and Trappers Organization (MHTO) was consulted on the use of specific HOL stations prior to the remote camera program initiation and whether these stations are the only ones that can be accessed for remote camera maintenance. Baffinland is further requested to make additional effort to deploy remote cameras at as many HOL stations as possible, even if this means only collecting data for limited periods of the year.	Noted that QIA's comments or recommendations on the wildlife remote camera program have been discussed at length at several meetings. Baffinland indicated that cameras were deployed at stations to address GN and QIA's concerns that during and based on monitoring outcomes to date, additional camera deployment is not warranted; however, Baffinland will consider if/when caribou population numbers at the project were to increase.

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Terrestrial Environment – #24	As previously requested in 2020, commit to testing the efficacy of snow track surveys by completing two simultaneously and comparing the results; and conduct research regarding wildlife road crossings and significance thresholds and analyze survey results relative to these to improve the usefulness of this survey.	Noted that snow track surveys are observational surveys intended to characterize wildlife presence/absence at the project. QIA should clarify what is the purpose of 'efficacy testing' and associated thresholds as it is not clear what QIA is requesting.
Terrestrial Environment – #25	<ol style="list-style-type: none"> 1. Provide data logs to substantiate their claims that project personnel scan for and report wildlife presence (prior to blasting proceeding). 2. Undertake targeted engagements with MHTO to evaluate concerns about the impacts of explosive use of caribou and identify periods when explosives may not be used. 	<ol style="list-style-type: none"> 1. A Quarry Blasting Caribou Mitigation Hierarchy was developed to inform decision-making and procedures to minimize potential adverse effects from quarry blasting on caribou. 2. To date blasting has been discussed mostly with respect to dust through the Dust Audit Committee and Baffinland is implementing the recommendations received. Look forward to discuss concerns with MHTO.
Terrestrial Environment – #26	Report on proposed changes to the terrestrial monitoring survey methodologies, statistical approaches or proposed adaptive management.	This request has been addressed in the 2022 TEAMR, which describes methods, assumptions, and adaptive management approaches for multiple TEMMP components.
Terrestrial Environment – #27	Clarify the timeline for developing the permafrost execution plan for high priority areas along the Tote Road.	The execution plan for high priority locations along the Tote Road involves focused and opportunistic remediation of highest priority borrow areas based on safety and permafrost degradation risk.

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Marine Environment – #1	<ol style="list-style-type: none"> 1. Report on opportunities to schedule increased shipping convoys (more convoys and/or more vessels in individual convoys), if possible, to reduce effects to narwhal. 2. Requests that repeat survey averaging, as recommended by DFO, be employed for abundance surveys of marine mammals in future. 3. Requests that NIRB consider which DFO narwhal survey should be considered baseline (2004 or 2013). 4. QIA noted that aerial surveys have been a key monitoring tool that has tracked significant changes in narwhal abundance and informed adaptive management and mitigation. The loss of this information source will add uncertainty to 2024 adaptive management. QIA requested Baffinland conduct leg 2 aerial surveys in 2025, not in 2026 as proposed in the 5-year monitoring program schedule. 	<ol style="list-style-type: none"> 1. Convoys are scheduled opportunistically and are an important mitigation to the marine environment, particularly to underwater noise. Baffinland would be happy to have the Head of Shipping attend the MEWG to discuss these practicalities. 2. Consistent with methods previously adopted by DFO and other research institutions in the High Arctic, Baffinland established a set of survey criteria required for survey replicates to be included in averaging for the purpose of deriving an abundance estimate for narwhal based on multiple aerial survey replicates. 3. See response to DFO-2. Baffinland requested that NIRB provide MEWG members with their evidence-based rationale should they make a formal recommendation on this matter, relative to the points raised in Technical Memorandum 1663724-488-TM-Rev0-77000. 4. See response to DFO-1.
Marine Environment – #2	<ol style="list-style-type: none"> 1. Prepare a summary of all the model specification changes over the years for the Bruce Head program. 2. Prepare a detailed memo on received sound levels and associated narwhal responses to inform the selection of an appropriate noise disturbance threshold. 3. Report on the potential value of integrating vessel-specific noise signature data into models. 4. QIA requested clarification on whether or not small vessels were included in models. 5. Requested Baffinland re-run the applicable models with the removed cases due to known killer whale presence added and report on any differences in results. 6. Requested Baffinland consider and report on ways to increase early 	<ol style="list-style-type: none"> 1. Any modifications to the statistical analytical models used for the Bruce Head Program are detailed in respective annual monitoring reports under 'Methods' section. 2. Currently do not have measured received sound levels associated with observed narwhal behavioural responses. There has been insufficient spatial overlap of the locations of visual observations and the locations of the acoustic recorders to facilitate such an analysis. 3. As this is a novel undertaking, Baffinland will consider viable options to integrate vessel-specific noise signature data into the Bruce Head analytical model

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	warning indicator (EWI) sample sizes from the Bruce Head program in 2024.	<p>and will continue to explore this with the MEWG.</p> <p>4. Small vessels were included in the analysis of Relative Abundance and Distribution, as detailed in Sections 4.3.2.1 and 4.3.2.2 of the <i>2023 Annual Report</i>.</p> <p>5. Killer whales acoustically detected on the 'Low Island (LI)' acoustic recorder referenced in the Sportelli et al.⁶ study does not equate to 'known killer whale presence' in the Bruce Head study area. And the behaviour observed by narwhal during the time period also suggested that killer whales present in North Milne Inlet in August 2017 did not enter the Bruce Head study area (South Milne Inlet) during the active survey period.</p> <p>6. Visual observations outside of the BSA is not sufficiently reliable to collect life stage data, and drone data are not sampled at random, which would bias the resulting EWI estimates. Overall, the data are simply restricted based on the number of narwhals that pass through the Bruce Head BSA in that year.</p>
Marine Environment – #3	<ol style="list-style-type: none"> 1. Requested whether behavioural observations were a new program element in 2023 for the Shipboard Observer (SBO) program. 2. Requested whether the data collection procedures outlined in the SBO training manual have been followed since program establishment. 3. Clarify whether Baffinland will continue the SBO program in 2024 and whether behavioural response data will be collected. 	<ol style="list-style-type: none"> 1. The data collection protocol for 'behaviour' was updated in 2023 to allow for additional analyses of marine mammal behavioural responses to icebreaking activities. 2. Due to changes in the methodology over the years, behavioural response data is not comparable across all years. In the 2024 SBO Program Annual Report, Baffinland will include behavioural data dating back to

⁶ Sportelli, J.J., J.M. Jones, K.E. Frasier, K.H. Westdal, A.J. Ootoowak, J.W. Higdon, and J.A. Hildebrand. 2022. Killer whale (*Orcinus orca*) pulsed calls in the eastern Canadian Arctic. *Arctic* 75(3): 344-363

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
	<ol style="list-style-type: none"> 4. Provide additional details on how estimation accuracy for closest point of approach (CPA) distances is assessed for estimates made with the naked eye. 5. Address the inconsistencies in the text regarding the supposed grey seal observations. 6. Provide a summary of all observations from the Marine Mammal Observation Network (MMON) program from 2020 to 2023 including those outside the RSA, and use the information to assess potential transboundary effects on migratory marine mammals. 7. Baffinland to compile, analyze and report on marine bird behavioural observations collected. 8. Compile all common eider and king eider duck observations from all years of SBO program monitoring, and analyze these data. 	<ol style="list-style-type: none"> 2023 (when the new methodology was established). 3. Will continue the SBO program in 2024; and behavioural response data will continue to be collected following the 2023 data collection protocol. 4. Marine wildlife observers (MWOs) were encouraged to use reticle binoculars (when the horizon was visible) or a clinometer, to measure distances to the associated sightings. MWOs regularly compared their naked eye estimations to measurements made. During data analyses, measured and estimated distances were truncated at 2 km to minimize uncertainty in distance estimation and measurement, species identification and group size at farther distances. For behavioural response modeling, sightings were also binned in 500-m categories, reducing the potential for estimation inaccuracies. 5. Vessel crew with the MMON program are not qualified experts/experienced MWOs but are continuing to learn and improve on their ability to identify and collect data on marine mammal observations. As the program continues, Baffinland expect species identification and data recording to improve. 6. Data reported outside of the RSA through the MMON program does not have sufficient effort to be considered as a tool for assessing transboundary effects, nor is it designed to do so given the data is not collected systematically by qualified MWOs/wildlife experts. 7. Data are compiled and reported to the CWS, and consists of location

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		<p>data (presence/absence) and density when sightings numbers allow.</p> <p>8. A summary of common and king eider duck observations since the beginning of the SBO program will be added in future reports.</p> <p>Note that at no point during consultations or while conducting the SBO program have Inuit indicated a concern that shipping operations were resulting in adverse impacts on seabird behaviour or on common and king eider duck occurrence or behaviour in a way that could impact these populations.</p>
Marine Environment – #4	Provide an update on its plans to meet the Steensby Inlet baseline requirements identified in Terms and Conditions 99 and 101, including anticipated timelines.	Baffinland provided a summary of baseline studies that have been undertaken for the Steensby component from 2021 to the present. Marine baseline studies are planned for 2024 and 2025.
Marine Environment – #5	Requested Baffinland describe the limitations with SDLT-12 site, if this is an ongoing concern that affects sampling efforts and if alternative sites with consistent flow are being considered.	The level of sampling replication at the SDLT-12 to meet the environmental effects monitoring (EEM) standards could not be completed due to limited habitat available for sampling. After ten (10) years of sampling, Baffinland can assure that there are no “alternative sites” available for sampling at SDLT12.

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Marine Environment – #6	Only one year of benthic invertebrate baseline data was collected at the MRTF F0-01 station, which raises concerns about the adequacy of the dataset for future reliable analysis. Requested clarification regarding 1) omission of benthic invertebrate sampling at station F0-01 in 2023; 2) why a single year of baseline data for a station is considered sufficient for future comparisons; 3) how the absence of this data will impact the overall study and its conclusions; and the reasons for starting collecting baseline data at this location.	Benthic invertebrate sampling are only a requirement of the EEM biological studies and not the AEMP program. However, Baffinland has summarized this information in the CREMP report for years. In addition, should the development of Deposits 2 and 3 go ahead in the future, acquiring additional benthic invertebrate community data at MRTF could be included in the CREMP and track benthic invertebrate community conditions at this location. Baffinland also noted that it did not indicate that a single year of baseline data is sufficient for evaluating effects on sediment quality/benthic invertebrate communities.
Marine Environment – #7	Given the variable weather conditions in the north and the limited time schedule to conduct sampling programs, Baffinland should outline what contingencies (i.e. additional days included in schedule) are available to manage inclement weather to ensure that all required data is collected for proper analysis to support the ongoing evaluation of project effects.	Barring threats to personnel safety, Baffinland is committed to ensure that sufficient data is collected for proper analysis to support the ongoing evaluation of Project-related effects. A few sites, including Mary Lake and Reference Lake 3, are only accessible by helicopter which limits access during inclement weather. This was the case in 2023. The 2024 sampling program will be initiated a few days earlier compared to 2023 to support having adequate sampling days in the season to allow for an extension of the program if there is inclement weather.
Marine Environment – #8	The TARP for fish should be triggered exclusively by differences between exposure and reference, and/or baseline and current results. Statistical approaches such as a BACI analysis should be used to objectively evaluate if there is a mine-related impact. QIA recommended the continued use of the remaining ecosystem components (i.e., water, sediment, benthics) as part of the investigation to identify causes that may have resulted in the observed impacts to fish.	The 2023 CREMP was executed to meet the design and assessment requirements specified under AEMP rev. 1, for which the AEMP Data Assessment Approach and Response Framework does not include a TARP. The TARP described in AEMP rev. 2 will become effective, and be applied to the CREMP, upon approval of drafted AEMP rev. 2. Baffinland agrees with the premise of the comment and will adjust the text in future CREMP to reflect the general principles presented.

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Marine Environment – #9	An explanation was requested to explain how higher densities of fish in Camp Lake, Sheardown Lake NW, and Sheardown Lake SE is associated by greater productivity from higher chlorophyll-a concentrations, despite these lakes being classified as oligotrophic (according to Wetzel ⁷).	This inference was not based on eutrophic or oligotrophic lake classification but rather relative concentrations of chlorophyll-a and relative fish densities. Although both Camp Lake and Reference Lake 3 are classified as oligotrophic, such a designation does not mean that productivity must be the same between lakes. The CREMP has consistently suggested higher primary productivity (i.e., greater phytoplankton abundance) and secondary productivity (i.e., benthic invertebrate density) at Camp Lake versus the reference lake which is believed to result in higher fish densities compared to the reference lake.
Marine Environment – #10	There are several instances throughout the CREMP and the EEM where essential information pertinent was provided in a footnote instead of the body of the report. This information should be included in the body of the text instead.	The use of footnotes reflects personal preference and the intent of these are to provide extra supporting content about material mentioned in the statement without breaking the flow of thought/detracting from the key messaging presented in the paragraph.
Marine Environment – #11	Baffinland compared fish health metrics from two different sample sizes (100 and 12). This is not statistically accurate and comparison should be made using comparable sample sizes to ensure the validity of the results.	Baffinland recognizes that the sample size of fish captured at the reference lake for the assessment of effects on littoral/profundal arctic char health at the mine-exposed lakes was inadequate in 2023. The comparison between the mine-exposed and reference sites in 2023 were not the only line of evidence used to conclude that there were no mine-related adverse effects on the health of arctic char at Camp Lake. Comparison to baseline data was also completed and trends in fish endpoints were evaluated over time.

⁷ Wetzel, R.G. 2001. Limnology: Lake and River Ecosystems. Third Edition. Academic Press. San Diego, CA, USA. 1006 pp.

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Marine Environment – #12	To eliminate ambiguity in the adaptive management process for benthic invertebrate, and ensuring clarity and consistency in decision-making, Baffinland is requested to remove professional judgement as part of the AEMP TARP and rely solely on objective thresholds.	Baffinland provided multiple approaches that may be considered or applied to data collected recently in order to determine whether a change in environmental conditions has occurred. This ultimately would require professional judgement be used to ascertain such a change. Therefore, Baffinland does not feel the removal of professional judgement, as part of the AEMP Data Assessment and Response process, is justifiable.
Marine Environment – #13	As above, QIA requested Baffinland remove professional judgement as part of the AEMP TARP and rely solely on objective thresholds for the discussion on fish health assessment.	As noted above, Baffinland does not feel that removal of professional judgement, as part of the AEMP Data Assessment and Response process, is justifiable.
Marine Environment – #14	Identify what factors may have contributed to the significantly smaller size of Arctic char in the Mary River effluent-exposed areas compared to the reference area.	The EEM fish health surveys were conducted at the same locations for each year and applied the same methodology. The main factor for the difference was potentially the fish age as there was some indication that fish sampled at the Mary River effluent-exposed area were slightly younger than those sampled at the Angijurjuk Lake Tributary. However, this cannot be confirmed as not all fish were lethally sampled for age analysis.
Marine Environment – #15	Provide an update by the end of September 2024 on the remediation status of the ten (10) culverts, with another update by the end of March 2025 on plans for further culvert remediation.	Will provide an update on the Tote Road culvert remediation project in applicable annual reports as well as future plans pending feedback on designs and approvals from the required regulatory agencies.
Marine Environment – #16	Consider increasing the timing flexibility of the field sampling programs for Arctic char in the Project lakes, reference lakes, and Tote Road streams, to improve their intra- and inter-annual comparability over time.	Field studies conducted for the CREMP have purposely been conducted at the same time each year (i.e., mid-August) since 2015 to ensure temporal continuity among studies. To the extent possible, this has ensured that benthic invertebrates and fish sampled for the program are at a similar stage of development year-to-year facilitating direct temporal comparisons.

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Marine Environment – #17	Recommended additional photographs be taken from different angles of the culverts at each Tote Road Crossings to provide clearer and more comprehensive views of the culvert conditions. This can improve the effectiveness of the monitoring program and ensure that any necessary remediation measures for fish habitat and passage through culverts are accurately identified and implemented.	Photographs provided in the Habitat Assessment Sheets are intended to show the overall condition of the culverts, as well as habitat assessment information such as habitat quality, and water inflow and outflow velocity and depth. Baffinland will facilitate site visits to the culvert locations of interest to ensure QIA is able to obtain the desired supplemental photographic information to support their assessment.
Marine Environment – #18	<ol style="list-style-type: none"> 1. Clarify which crossing is identified as BG-50 and specify whether it is a culvert or a bridge structure. 2. Confirm if the photographs in Appendix B under the label BG-50 are indeed of that crossing or if they are mistakenly labeled and are actually of CV-126. 3. Clarify which crossing had perched culverts that are affecting fish passage. This information should be included in future annual reports. 	BG-50 is the culvert crossing immediately south of the KM 63 bridge. Appendix B photos correctly show the bridge structure at KM 63 and adjacent culvert crossing BG-50. Reference to label CV-216 on pages 59 and 60 of Appendix B are artifacts of the document editing process and should be disregarded.
Marine Environment – #19	Confirm whether the reference to CV-112 station in the Tote Road Fish Habitat Monitoring Report is a clerical error. Requested information on the site that should be included in the 2024/2025 remediation plan.	Baffinland confirms this is a clerical error and the name of the culvert crossing referenced is CV-112.
Marine Environment – #20	Discuss whether the culvert at BG-03 will be considered for remediation now that fish have been caught downstream. This new information about the presence of fish downstream may indicate the need for improved fish passage through this culvert, and its consideration for remediation is crucial for ensuring habitat connectivity and fish migration.	BG-03 was assessed during the spring of 2024 and there is a gentle ascent toward the culvert at BG-03, on the downstream side among the rocks, accessible to stickleback. The downstream portion of the stream has rarely contained stickleback and the area experiences low water levels throughout most of the open water season. Baffinland will continue to monitor if major construction works are required to ensure sufficient fish passage at BG-03 is maintained.
Marine Environment – #21	Photograph on the downstream side of the Tote Road shows three (3) culverts, of which two are clearly perched. Confirm if the middle culvert can or does become perched during low flow conditions.	It was noted in late July 2023 that the outlet of the middle culvert was perched. The culverts at BG-04 were subsequently replaced in early 2024, following the submission of the 2023 Tote Road Annual Report.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Marine Environment – #22	Confirm if there are any plans to remediate the culverts at crossing CV-021 to improve fish passage through the culverts. If not, add this culvert to the list of those requiring remediation or justify why this is not required.	CV-021 was assessed for fish habitat and fish passage during the spring of 2024 and it was confirmed that the upstream habitat can be accessed by Arctic char, as individuals were observed in the upstream pond. There is no need to complete additional remediation for Arctic char to access the upstream area. Stickleback have not been captured in the riffle habitat within 10 m downstream of the culvert. Since stickleback will not attempt to swim upstream, there is no need to complete any remediation of the culvert to provide access to the upstream environment.
Marine Environment – #23	Information is requested to understand the remedial actions implemented to mitigate the potential impacts to downstream fish habitat and the aquatic environment from the seepage observed at crossing CV-099.	The seepage noted in 2023 at crossing CV-099 is not consistent from year to year and there is no potential impacts to fish or fish habitat at CV-099. The site will continue to be assessed as part of the Tote Road Fish Habitat Assessment program.
Marine Environment – #24	Requested information to understand the steps being implemented to mitigate the potential impacts from the culvert at crossing CV-128a being buried by sediment causing the water to flow over the road during freshet and blocking fish passage.	Preliminary results from the 2024 assessment program did not identify any blockage at CV128a and no mitigation actions are required. The site will continue to be monitored during the Tote Road Fish Habitat Assessment program.
Marine Environment – #25	Additional information is requested to understand the steps being undertaken to address the potential impacts to downstream fish habitat and fish passage from debris that washed into the stream at crossing CV-186 which caused damage to the culverts.	Preliminary results of the 2024 assessment program indicated damage to the outlets of both culverts has occurred since the 2023 assessment, potentially affecting fish passage at this crossing. A remediation plan will be developed for review by relevant regulatory agencies to address the recently observed condition of the culverts.
Marine Environment – #26	Provide a rationale for not sampling Phillips Creek or include sampling progress in this creek in the methodology as per Term and Condition 48.	Baffinland previously consulted the MHTO on sampling locations for the 2021 and 2022 monitoring programs, and will be reviewing the locations with the MHTO for future programs.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Marine Environment – #27	<ol style="list-style-type: none"> 1. QIA raised concerns with respect to the temporal separation of the sampling programs in 2021, 2022 and 2023 versus the existing pre-2010 baseline data, and requested additional information. 2. Design of the marine monitoring programs to be used during the operations phase should be established now, based on lessons learned at Milne Inlet, to ensure the parameters, methods, and sampling locations are comparable over time, to improve their power to detect changes, and allow fulsome review by intervenors. 	<ol style="list-style-type: none"> 1. Noted that there is substantial overlap in parameters, scope and methods for data collected pre-2010 and data collected post-2020. The sampling sites were not exactly matched in the two time periods as these were responsive to evolving plans for port design. Also, the 2021 and 2022 data collection program was designed to meet requirements of an FAA permit application and disposal-at-sea permit application, and not to support a future EEM program. 2. Baffinland is presently designing an EEM program for Steensby Port, with Year 0 sampling planned for the summer of 2025 prior to the start of any marine-based construction activities.
Marine Environment – #28	Follow the more precautionary 50 kPa overpressure threshold for all Project activities in or near water, and clarify in Baffinland's discussions of related Project Certificate conditions whether it has followed this threshold.	Baffinland has previously committed to adhere to the 50 kPa threshold and will adhere to this threshold during construction and operation of the Steensby Port and other infrastructure along the southern route.
Marine Environment – #29	Requested Baffinland report both effect sizes and statistical power to assess difference between fishing areas.	Effect size and statistical power are complementary metrics that are currently being reported together and will continue to be reported in the MEEMP annual reports.
Marine Environment – #30	Clarify what further studies will be conducted to ensure Project vessels are capable of operating safely along the entire southern route in open water, during shoulder seasons, and in winter. QIA also requested Baffinland provide reports on future sea ice studies within the annual reports.	No additional studies are anticipated at this time. Should any be commissioned, Baffinland will provide them to the NIRB through the annual reporting process.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Marine Environment – #31	Requested Baffinland apply the lessons learned, following the risk-based assessment of ship's ballast water, to mitigate risk from the introduction of non-indigenous species via Project vessel ballast water and continue sampling Project vessels to ensure that their treatment practices and systems are meeting both the D-1 and D-2 standards ⁸ .	Baffinland re-iterated the commitments made for the SOP indicating that Baffinland will update the Risk Assessment for Introductions of Aquatic Invasive Species from Ballast Water, and will continue to support the collection of biological data to evaluate efficacy of ballast management measures and identify species of concern.
Marine Environment – #32	Requested that NIRB update Terms and Conditions 86 through 91, to ensure they reflect regulatory changes and meet their intended purposes.	n/a
Socio-economic Environment – #1	Engage in further discussions with the Qikiqtaaluk Socio-Economic Monitoring Committee (QSEMC) regarding shared interest and priorities, and provide additional detail on what collaborative monitoring will occur.	Baffinland will continue to have discussions with QSEMC and the Socio-Economic Working Group (SEMWG) to further discuss priorities and collaboration; however, the frequency at which the QSEMC meets is at the discretion of the GN, who chairs and organizes these meetings.
Socio-economic Environment – #2	Continue to engage the SEMWG and QSEMC and review specific monitoring requirements and determine if smaller socio-economic working groups are necessary.	Will continue to engage with the QSEMC and the SEMWG on the socio-economic monitoring program (SEMP). Baffinland also regularly engages North Baffin community members on various socio-economic topics.
Socio-economic Environment – #3	Seek more reliable, updated sources on in-migration of Inuit from to the North Baffin local study area (LSA), out-migration of Inuit from North Baffin LSA, and Nunavut net migration rather than drawing information from 2016 and 2019 data.	Updated data from the GN is not available for the indicators and for this reason, Baffinland continues to present data from various non-government sources to help better understand this topic.
Socio-economic Environment – #4	<ol style="list-style-type: none"> 1. Provide additional information regarding how programs such as the Work Ready Program (WRP), ABE, PASS or Pre-Trades training were adapted or changed. 2. Provide more information on Baffinland's liaison with Nunavut Arctic College and their involvement 	<ol style="list-style-type: none"> 1. The Community WRP has been enhanced in 2023 to focus on ensuring that its graduates have acquired skills to take on employment at Baffinland or elsewhere. Baffinland also discusses the possible options for

⁸ D-1 standard requires ships to conduct an exchange of ballast water such that at least 95% of water by volume is exchanged far away from the coast, while the D-2 standard specifies that ships can only discharge ballast water that meets specific requirements for living organisms.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
	in the promotion of work or mine-related programs.	those employees who wish to pursue further studies. 2. Will provide more detailed information on outreach with Arctic College in future reports.
Socio-economic Environment – #5	Describe how the annual employee survey was designed including online survey options in collaboration with the GN-Department of Health and Social Services, the Nunavut Housing Corporation (NHC) and other relevant stakeholders.	Baffinland will add this topic for discussion at the next SEMWG meeting.
Socio-economic Environment – #6	Baffinland did not provide the information as required by Term and Condition 134. The same was requested last year.	Information relating to the three (3) Full Time Equivalents is provided in results section of Term and Condition 134 in the <i>2023 NIRB Annual Report</i> .
Socio-economic Environment – #7	Continue to provide information on any additional offerings for work/study programs available, including whether participants were hired by Baffinland.	Will continue to report on work/study programs available to Project employees.
Socio-economic Environment – #8	Provide credentials and certificates that can be transferrable to other workplaces and the number of employees that take part in it.	Will continue to provide opportunities to its employees when possible. For example, in 2023, one Inuk employee successfully passed a Cisco Certified Network Associate course with an external training organization.
Socio-economic Environment – #9	Clarify where the listing of formal certificates and licenses that may be acquired at site is located for easy access to training participants or employees.	This information is provided to any employee who requests it. Baffinland will post this on a bulletin board in the Training Department to make it easier to find.
Socio-economic Environment – #10	Report on the quantitative number of southern/foreign employees as well as directly address the point of hiring foreign labour by indicating the number of employees sourced from foreign markets and the country of origin of foreign labour.	The labour market review is conducted every three (3) years to align the results close to census data. In 2022, Baffinland and QIA continued to work with Mining Industry Human Resources Council to develop a skills equivalency to assess Inuit skills and knowledge acquired through traditional skills as opposed to southern education.
Socio-economic Environment – #11	Provide the results of the surveys detailing the employees' level of education and previous employment status to bring reporting requirements in compliance with Term and Condition 140.	Baffinland provides information of new hire employees' level of education and previous employment status in the results section of Term and Condition no. 144 in the <i>2023 NIRB Annual Report</i> ; and is therefore in compliance with Term and Condition 140.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Socio-economic Environment – #12	Provide Inuit employees with information regarding their rights under the Impact and Benefit Agreement (IIBA).	This information will continue to be provided in the IIBA Orientation.
Socio-economic Environment – #13	Baffinland should seek community-led indicator data on the topic of barriers to the employment of women with respect to childcare availability and costs, as per Term and Condition 145.	Baffinland administered its Inuit Employee Survey in Q4 of 2023, where questions relating to childcare availability and cost were posed to Inuit employees at the Mary River site. This is one of the several avenues Baffinland is able to track the barrier of childcare availability.
Socio-economic Environment – #14	Detail the efforts and discussions taken place regarding the negotiation for manageable rental rates and potentially emphasize this in the basic financial literacy training currently offered.	The NHC is responsible for the setting of rent scales and the development of housing-related policy. Baffinland will continue to communicate housing-related issues, relating to Project employees, through its annual report.
Socio-economic Environment – #15	As per Term and Condition 148, provide detailed information regarding broad indicators of dietary habits.	Baffinland has been waiting for the submission of the Pond Inlet Country Food Baseline Study, the CRLU Assessment and the Inuit Stewardship Plan before making any amendments to its own monitoring programs.
Socio-economic Environment – #16	Baffinland did not provide the risk profile for temporary closure in 2023.	The risk profile for temporary closure in 2023 is low.
Socio-economic Environment – #17	Provide all required information identified in Term and Condition 150, with the information included in future annual reports.	All flights flown across Sirmilik National Park were above 2,000 feet. Parks Canada (PC) also confirmed that scientific and research activities are exempt from the 2,000 feet altitude restriction across Tallurutiup Imanga National Marine Conservation Area. Daily shipping schedules are publicly available on Baffinland's Facebook page and can be accessed on Baffinland's website in real time. Baffinland will tag PC on its Facebook posts in the 2024 season and circulate the 10-day schedule to the MEWG.
Socio-economic Environment – #18	Consider additional programs or measures to facilitate home ownership or access to affordable housing.	Baffinland provides basic financial literacy training, which covers topics such as budgeting that considers rent, or home ownership, or loans through the WRP.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Socio-economic Environment – #19	Provide information about access to mental health counselling for employees who are not on site.	Baffinland's benefit plan includes an Employee and Family Assistance Program, which offers employees (both on- and off-site) and their dependents professional short-term counselling as well as topic-specific life coaching on an as-needed basis.
Socio-economic Environment – #20	Outline the specific information that is tracked through the QSEMC process as per Term and Condition 154.	Baffinland tracks information as defined in the SEMP through the QSEMC process with the information integrated into the annual SEMR, where relevant.
Socio-economic Environment – #21	Describe Baffinland's intent in providing an updated report outlining the detailed action taken in dealing with cultural conflict at site.	Provided a list of mitigation measures whose aim are to encourage on-site cohesion of employees through cultural awareness and social programs, which was provided 2023 <i>NIRB Annual Report</i> . No additional information provided at this time.
Socio-economic Environment – #22	Continue to promote the Employee and Family Assistance Program (EFAP) to employees and their families.	Baffinland will continue to make the EFAP available to Project employees and their families.
Socio-economic Environment – #23	Develop a Human Health Working Group alongside the GN.	Baffinland engages with the GN through an MOU directly related to health care services with the GN's Department of Health. The development of an additional working group to discuss human health with the GN would be repetitious in nature.
Socio-economic Environment – #24	Negotiate a Development Partnership Agreement with the GN.	Baffinland and the GN cannot negotiate a Development Partnership Agreement as instructed by Term and Condition 167 as the program no longer exists.
Socio-economic Environment – #25	Term and Condition 168 request Baffinland Outline variable that are relevant to the Project and which should be adopted by the QSEMC monitoring program, including population movement, barriers to employment, project harvesting interactions and indirect Project effects on home life. Requested Baffinland refer to QIA SE #11, QIA SE #13, QIA SE #15 and QIA SE #20 for requests related to this Term and Condition.	QIA requests have been addressed in Baffinland's response to QIA SE #11, QIA SE #13, QIA SE #15 and QIA SE #20.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Inuit Knowledge, Culture, Land and Resource Use and Inuit Qaujimajatuqangit (CRLU/IQ) – #1	Address whether shipping schedules are proposed to MEWG and adjacent agencies on a weekly basis, and to the RSA communities on a monthly basis.	Shipping schedules have not been provided to MEWG members or adjacent agencies historically but can be despite all Project vessels being available for live tracking through the automatic identification system.
CRLU/IQ – #2	Provide concrete examples from Baffinland's engagement activities regarding mitigation and monitoring of community member and Elder input and how this input has influenced or informed Baffinland's operations. Additionally, Baffinland should provide some basic evaluation data regarding engagement on the topic of mitigation and monitoring; data should include both quantitative (e.g., participation metrics) and qualitative (e.g., participant satisfaction) aspects of engagement.	Baffinland reports where Elders and other Inuit have influenced project and/or monitoring program design on a case by case basis. However, Baffinland does not issue a consolidated report each year that summarizes the modifications it's made to its monitoring programs or mitigation strategies, based on Elders input or any other reason. Modifications are developed and discussed holistically through various reporting obligations and should be evident to reviewers based on their areas of concentration. Baffinland will review the required data fields from its engagement records and provide more quantitative data in subsequent reports. Baffinland is reluctant to provide qualitative data, which may be subjective and cast Baffinland as altering some participant's perceptions of the engagement.
CRLU/IQ – #3	Provide usage data on existing emergency shelter purposes and an analysis on whether the number and location of shelters are adequate. The same was requested last year.	This request has been addressed in previous responses and noted that there has been no use of emergency shelters, nor any requests or calls for aid within the PDA in 2023.
CRLU/IQ – #4	Provide information on food security and harvesting interactions for Inuit, including Inuit who are not employees of Baffinland. Also, include a discussion of specific Project interactions with harvesting in future reports. The same was requested last year.	Baffinland is waiting for the submission of the Pond Inlet Country Food Baseline Study, the CRLU Assessment and the Inuit Stewardship Plan before making any amendments to its own monitoring programs. Baffinland encourages QIA to complete the work it has assumed so that the information collected since 2020 could be used to address the issues identified.

TOPIC	QIA'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
CRLU/IQ – #5	As requested numerous times in the past, Baffinland should include in the annual reports indication of which monitoring programs are designed with IQ, and which ones utilize IQ for analysis and interpretation of results. An explanation of how IQ shaped the monitoring program(s) and supported interpretation of the results should be included in an overview section as a component of compliance with this requirement, which appears in numerous Project Certificate conditions.	Has provided an adequate response to this request each year it has been issued, explaining in detail how various programs have been developed in the past with consideration for IQ and community knowledge. A path forward here may be through QIA's review of Baffinland's IQ Framework, which has been publicly available for review since May 2023. Many of the items raised by QIA that relate to IQ could be answered by that document in its current form, or through edits and additions.
CRLU/IQ – #6	Baffinland to consider IQ and Inuit involvement in progressive and end of life reclamation planning activities. Also requested to identify whether and how Inuit will be involved in this work in subsequent years.	Currently preparing a new revision of the Interim Closure and Reclamation Plan (ICRP) for the Project. Specific discussions have been held with QIA on plans for future engagements with Inuit regarding closure, and the next revision of the ICRP will include further details on the engagement strategy that Baffinland will implement to support closure planning.

Table 3-5: Government of Nunavut's Comments and Baffinland's Response for the 2023 Annual Report for the Mary River Project.

TOPIC	GN'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Snow track surveys, GN – #1	<ol style="list-style-type: none"> 1. Ensure the definition of deflection used in snow track surveys mirrors the definition provided in the <i>Draft TEMMP</i>. 2. Distinguish (during data collection, subsequent analyses, and data visualization) between tracks found moving parallel to the road versus those moving along the road itself when categorizing snow tracks. 3. Prevent snow track frequency data adjusted for survey effort. 4. In future surveys, record the distance of track from the road at the time of first observation. This information should be summarized by species in future annual reports. 	<ol style="list-style-type: none"> 1. During the May 2024 TEWG meeting, Baffinland committed to reviewing and refining the definition of caribou deflection at the Project and the outcomes will be shared with the TEWG and included in future reporting. Outcomes will be updated within the snow track survey protocol to align with field classification of snow tracks and subsequent reporting. 2. Snow track monitoring and associated data capture will be reviewed and updated in relation to the refined definition of deflection. 3. Will consider adding survey effort in updated datasheets and protocols for future annual reports. 4. Will consider adding track distance estimations from the road in future annual reports.

TOPIC	GN'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Caribou Aerial Survey, GN – #2	<ol style="list-style-type: none"> 1. The results on caribou abundance and density estimates the caribou aerial survey were not reported and the GN recommended the Baffinland revise Appendix G.5.1 of the <i>2023 Annual Report</i> to include the results. 2. Requested clarity on the Baffinland's modelling process and provide justification or clarification for the assumption of independence of observations made by the primary and secondary observers. 	<ol style="list-style-type: none"> 1. Section 9.5 of Appendix G.5.1 was missing results on caribou abundance and density estimates. The 2023 TEAMR has been revised to include this missing information and reissued to the NIRB public record. 2. To the degree possible, primary and secondary observers made independent observations of caribou. For future aerial surveys, Baffinland is open to discussing the pros/cons of the 'independent observer' versus 'trial configuration' protocols to develop MRDS functions and estimate abundance/density of caribou.
Tote Road Traffic, GN – #3	<p>Concerned that haul truck traffic necessary to transport the target of 6 Mtpa may exceed the FEIS Addendum predictions and recommended Baffinland:</p> <ol style="list-style-type: none"> 1. Based on project-specific traffic data, provide revised haul truck and non-haul truck traffic predictions necessary for the transport of 6 Mtpa of ore on the Tote Road in future years. 2. Describe any additional mitigation or monitoring that will be implemented in response to any predicted exceedance of Tote Road traffic rates provided in the FEIS. 3. Provide a revised version of Figure 6-1 of Appendix G.5.1 showing corrected mean daily traffic rates. 	<ol style="list-style-type: none"> 1. Can verify that in years when 6 Mt of ore has been hauled the ore haul transits have remained within a reasonable range of the 236 average daily transits as included in the PIP, PIPE, PIPR and SOP. 2. Baffinland implements a robust monitoring program along the Tote Road that monitors for applicable valued ecosystemic components (VECs) regardless of haul traffic. Should monitoring data suggest a potential for impacts to VECs as a result of operations or activities on the Tote Road, Baffinland will adjust decisions and actions accordingly through adaptive management measures. 3. The 2023 TEAMR will be revised and now includes the updated Figure 6.1.
Passive Dustfall Monitoring, GN – #4	<p>Results of passive dustfall sampling in 2023 indicated that annual dustfall exceeded predictions at most monitoring sites, with no discussion provided on the cause of exceedances. Recommended Baffinland provide an explanation as to:</p> <ol style="list-style-type: none"> 1. What deficiencies or invalid assumptions in the Project's dustfall modelling could have resulted in the exceedances presented in the annual report. 2. How future dustfall modelling for the Project will be modified to account for the current inaccuracy that exists. 	<p>In general, it is difficult to make comparisons between air dispersion modelling results, especially from 2013, and dustfall monitoring results of an active mine site from 10 years later in 2023. Updated air dispersion model results for dustfall are available in the Mary River Project – Sustaining Operations Proposal Air Quality Assessment document. Air dispersion models are based on a number of assumptions and are typically expected to agree with actual ambient air quality measurements within a factor of two.</p>

TOPIC	GN'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Dustfall Imagery Analysis, GN – #5	<ol style="list-style-type: none"> 1. Provide a discussion, further investigation, and supporting evidence regarding factors which may have contributed to the sharp peak in dustfall extent detected in 2019 by satellite imagery. 2. A pilot study looking at the satellite image-derived Snow Darkening Index and total suspended solids (TSS) in snow samples did not detect a significant relationship between the two metrics. Baffinland should continue the snow sampling pilot study in 2024 and more samples should be collected during a broader sampling period. Additionally, snow sampling should target days with minimal cloud cover. 	<ol style="list-style-type: none"> 1. A visual review of the images from 2019 showed less snow cover than images in the same year with less extensive dust and images in 2020 on or within a day of the same date. Less snow cover could result in more exposed ground, a possible source of dust, and potential misclassification of ground as dust. There were no peaks in total ore hauled or Tote Road traffic in 2019 compared to 2018 and 2020. Further investigation and discussion will be provided in the 2024 TEAMR. 2. The snow sampling pilot study was continued in the spring of 2024. Image footprints and corresponding image acquisition dates up to the end of May were provided to the sampling field crew to better align sampling and imagery. Samples were collected on days with minimal cloud cover. Baffinland will take the GN's recommendation into consideration for the 2025 sampling program.
Helicopter Traffic, GN – #6	<ol style="list-style-type: none"> 1. Provide details on what is meant by “unreasonable” and “impractical” in the justifications for low-level flights. 2. Ensure that the category for short distance flights is subdivided to distinguish between flights where low-level flying is: a) a specific regulatory requirement of the activity being undertaken; b) necessary for safety; c) necessary to collect the samples; and d) being justified solely on the preference to save time, fuel or other factors. 3. Provide data summarizing the distance of low-level flights that are classified as short distance according to the subdivisions specified in the above recommendation. Baffinland should also provide the mean, maximum and minimum distances of low-level flights. 4. In collaboration with the TEWG, undertake an evaluation of the Project's helicopter flight corridors in relation to the distribution and 	<ol style="list-style-type: none"> 1. The meaning of the terms “unreasonable” and “impractical” are at the discretion of the pilot as described in Table5-6. 2. At the request of the GN, the pilot rationale table was reviewed in 2023, and the action item completed as detailed in 1. This request for further detail is unreasonable and unlikely to lead to improvements to overflight mitigation. 3. The pilot rationale table was reviewed in 2023, and the action item completed as detailed in 1. 4. Baffinland will consider this request.

TOPIC	GN'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
	movements of caribou. The TEWG should determine whether areas of significant wildlife importance can be delineated and avoided.	
Language Protection, GN – #7	<ol style="list-style-type: none"> 1. Provide additional details in the annual report about the use of Inuktitut across the project sites. 2. Include in its annual reports an assessment of how its Aulattijiit program supports compliance with the <i>Inuit Language Protection Act</i>, especially Section 3 of this Act. 	<ol style="list-style-type: none"> 1. All employees are made aware of Baffinland's Inuktitut in the Workplace policy during the course of their employment. For safety reasons, English remains the language at the Mary River Mine. There is no such report to capture number of times Inuktitut language is used. 2. Baffinland has ensured that the Aulattijiit program makes available to its participants documentation in English and Inuktitut. An experienced Inuit co-facilitator who speaks Inuktitut has also been used for all Aulattijiit workshops.
Gender-based differences in employee retention rates, GN – #8	Recommended Baffinland provide an assessment or explanation of which of the strategies or programs put in place will help to set and maintain the trend that shows that the proportion of Inuit women who keep their jobs is higher than that of men in the region.	The proportion of Inuit women working on site increased slightly when compared to 2022 values. Many variables influence employment rates such as introduction of new positions, variance in qualifications between applicants, turnover, etc. Baffinland is committed to Inuit employment through all phases of the Project, including providing equal opportunity to both Inuit women and men.

Table 3-6: Crown-Indigenous Relations and Northern Affairs Canada's Comments and Baffinland's Response for the 2023 Annual Report for the Mary River Project.

TOPIC	CIRNAC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Dust Management and Monitoring, CIRNAC – #1	As recommended since 2021, Baffinland should consider including several measures to increase the quality of monitoring activities related to dust management and monitoring. CIRNAC acknowledged that Baffinland have addressed some of the recommendations but Baffinland should consider improvements to the quality of monitoring activities.	Noted that dustfall impacts and mitigations are already being overseen by the Dustfall Audit Committee. However, it is not clear how a supplementary Conceptual Site Model (CSM) would further inform dust modelling at the Project beyond existing studies and monitoring programs.

TOPIC	CIRNAC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
WRF–Identification and Management of Acid Rock Drainage–Metal Leaching (ARD-ML) Waste Rock Materials, CIRNAC – #2	<ol style="list-style-type: none"> 1. Provide an updated life of mine estimation of potential acid-generating tonnages and confirmation that the WRF design and contingencies for closure are still appropriate. This issue remained relevant during the 2021, 2022 and 2023 annual review cycles. 2. Confirm the neutralization potential of the silicates in the waste rock and evaluate how the results impact the practice of determining ARD potential based on paste pH and 0.2% sulfur content only. 	<ol style="list-style-type: none"> 1. Baffinland addressed this concern in its previous response to CIRNAC in the 2022 <i>NIRB Annual Report</i>, and in the PAG Waste Reconciliation Memo recently provided. 2. The 2023 data are consistent with all previous data; therefore, there is no change in expectations with respect to neutralization potentials of silicate minerals.
Groundwater Monitoring and Management Plan, CIRNAC – #3	<ol style="list-style-type: none"> 1. No analytical data was presented as part of the 2023 groundwater monitoring program so there is no evidence to show that groundwater was sampled and whether impacts on groundwater quality have been identified. 2. Confirm if the new wells will be equipped with bentonite seals and what preventative and/or mitigation measures will be completed to prevent surface water from entering the wells and impacting groundwater quality sampling. 3. Provide additional rationale as to how two (2) test pits are deemed satisfactory for determining the presence of groundwater within the WRF. 4. Expand the groundwater monitoring program to include additional testing in the WRF area and other potentially significant sources of groundwater contamination at the mine in future years. 	<ol style="list-style-type: none"> 1. Due to the limitations that occurred during the 2023 groundwater monitoring program, water quality and response testing results may not be representative of the actual water quality and hydraulic conductivity values. As a result, a discussion of the results was not provided for 2023. Further testing and monitoring is planned to be completed during the program in 2024, following installation of the monitoring wells. 2. New wells are scheduled to be installed in August 2024 and will be completed with a conventional sand pack and bentonite seal, protected against permafrost damage, properly developed and slug-tested to determine hydraulic conductivities, and then water quality samples collected, with site QA/QC protocols carefully followed to ensure reliability of the data. 3. In 2022, Knight Piesold completed a comprehensive review of the groundwater monitoring program and developed risk-based screening criteria. The risk-based approach to groundwater monitoring focuses on the facilities presenting

TOPIC	CIRNAC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
		<p>the greatest potential risk to impacting surface water.</p> <p>4. Will continue to apply the risk-based approach to groundwater monitoring, detailed in the Groundwater Monitoring Program Review and Assessment.</p>
Aquatic Effects Monitoring Plan and Dustfall Monitoring, CIRNAC – #4	<p>As recommended in 2022:</p> <ol style="list-style-type: none"> 1. Provide the dustfall chemical composition data as required by Term and Condition 21. 2. Update the CREMP and Lake Sedimentation Monitoring Program to clearly define the trends in dustfall with the intent of informing the adaptive management of these activities. 	<ol style="list-style-type: none"> 1. Dustfall chemical composition data will be submitted in subsequent annual monitoring reports when available. 2. Will investigate the link of dustfall chemistry data with sediment trap data (and any proximal lake sediment data) for the next report cycle if there is sufficient sediment volumes to run the analysis.
Performance of New MS-11 Surface Water Management Pond at KM105, CIRNAC – #5	<p>As recommended in 2022:</p> <ol style="list-style-type: none"> 1. Confirm installation and commissioning of a water treatment system as a polishing step for TSS removal. 2. Provide the results of MS-11/KM105 pond monitoring in the <i>2024 Annual Report</i> as per Term and Condition 24. 	<p>Will provide a full summary on activities related to the KM105 Pond in the 2024 NWB-QIA Annual Report for Operations, including details regarding the installation and commissioning of a water treatment system and a polishing step for TSS removal, and KM105 Pond monitoring results.</p>
Surface Water – Elevated Nitrate in Surface Water, CIRNAC – #6	<p>As recommended since 2022:</p> <ol style="list-style-type: none"> 1. Conduct monitoring and source contaminant characterization along the MRTF to assess additional potential impacts of explosives. 2. Provide additional details on how the trends for nitrogen parameters from mine-related influences will be investigated across the whole mine site. 	<ol style="list-style-type: none"> 1. No additional monitoring or source contaminant characterization is currently warranted for the MRTF given that i) station MS-08 discharge is a known source of nitrate to MRTF for which Baffinland has the ability to control, and ii) existing monitoring has demonstrated no effects to aquatic biota within the MRTF, consistent with concentrations of nitrate well below the water quality guidelines for the protection of aquatic life. Baffinland will continue monitoring of the stations along the MRTF as outlined in the existing AEMP program, as well as to continue to track changes in concentrations in nitrate within MRTF as part of the existing CREMP and EEM programs.

TOPIC	CIRNAC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
		<ol style="list-style-type: none"> Temporal trend analysis of nitrate concentrations will be conducted in 2024 to evaluate statistically significant temporal trends among years of mine operation and/or baseline that would be suggestive of a mine-related effect.
Thermal Monitoring of WRF, CIRNAC – #7	<ol style="list-style-type: none"> Install new temperature, oxygen, and soil moisture probes in the WRF. Present the available oxygen, barometric, and soil moisture data in the <i>2024 Annual Report</i>. Describe all the calibration steps performed for the thermal model, how the calibration was validated, and the kind of sensitivity analysis performed. Discuss its rationale for not incorporating heat generation from geochemical reaction and convection into the present thermal model. Investigate the cause of the elevated temperatures in the WRF and discuss the potential impact on future ARD-ML development within the WRF. Provide flow characteristics of the frozen waste rock mass and verify that it meets the design intent. Discuss the potential for ground subsidence to contribute to the negative elevation observations and install settlement plates to monitor ground elevation. 	<ol style="list-style-type: none"> The 2024 annual report will include the plan for recovery of any “down” instrumentation, and whether new instrumentation is planned for the coming year. All available WRF instrumentation data will be reported in the 2024 QIA-NWB Annual Report. Detailed information was provided on the calibration steps performed by Baffinland and noted the model calibration process consisted of adjustments to the model inputs until the computed temperature profiles at different times are in reasonable agreement with trends measured in the reference strings. The primary objective of the thermal model is to predict the overall thermal regime of the pile to validate the operational concept of maintaining the pile in a frozen state (except for the active zone subject to freezing and thawing). Due to the large scale of the 2D model geometry, and the localized nature of the warming event measured along BH1, it was not considered practical or necessary at that point to run separate and more complex thermal models to investigate the patterns measured along BH1. Data from thermistor strings show that the pile is sustaining freezing conditions during all times as per the design intent, even during temporary and localized events of warming temperatures, except for

TOPIC	CIRNAC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
		<p>the upper active zone subject to seasonal freezing and thawing.</p> <p>6. The improvement in water quality over time demonstrates that seepage through the bulk of the pile is limited, consistent with the pile sustaining freezing conditions during all times, except for the upper active zone subject to seasonal freezing and thawing. This validates the design intent of minimizing ARD-ML by limiting water flow through the pile and slowing the rate of sulphide oxidations due to freezing conditions.</p> <p>7. This is a survey error and the ground elevation continue to be reported at ~ 581 m at instrumentation location T2.</p>
Groundwater and Surface Water ARD-ML Investigations, CIRNAC – #8	Collect evaluate, and discuss temporal and spatial surface water quality trends for total and dissolved fractions above reporting limit for the following key markers of ARD-ML: pH, acidity, sulphate, aluminum, iron, manganese, cadmium, chromium, copper, lead, iron, mercury, nickel, lead, selenium and zinc reported by Baffinland as elevated in relation to baseline conditions. This should include potential points sources for the project (e.g., open pit, quarries, WRF, ore stockpiling, and haulage routes).	Aqueous concentrations of all parameters are assessed at waterbodies at and near the mine site and compared both spatially and temporally on an annual basis as part of the CREMP with the objective of evaluating overall impacts from Baffinland operations, including potential inputs from the WRF, on aquatic environments. The 2023 CREMP report contains the most recent results regarding the quality of water, and potential changes in water quality over time, within creeks, rivers, and lakes associated with the Project.
Permafrost as Main ARD-ML Mitigation Strategy, CIRNAC – #9	<ol style="list-style-type: none"> 1. Evaluate the predicted ground surface temperatures and permafrost development in light of the effects of climate change on the waste rock pile using recent climate change predictions. 2. Discuss the implications on the thermal/physical stability of and potential of ARD-ML development in the waste rock. 	A thermal model to predict the impact of climate change on the depth of ground subject to seasonal freezing and thawing (active zone) at the WRF is currently being developed. A memo summarizing the results of this investigation will be provided in the next update to the ICRP.

TOPIC	CIRNAC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Anti-discriminatory policies and mechanisms to minimize any potential cultural conflicts in the workplace, CIRNAC – #10	Provide a revised status update concerning efforts undertaken to remain compliant with Commitment No. 93 included in Appendix F.1 of its <i>2023 Annual Report</i> .	Committed to providing cross-cultural training to its employees and contractors. Included a list of training employees and contractors receive at site, including cultural awareness training; Inuit Cultural Engagement Workshops; and Respectful Workplace training.

Table 3-7: Environment and Climate Change Canada's Comments and Baffinland's Response for the 2023 Annual Report for the Mary River Project.

TOPIC	ECCC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Non-compliant flights over Snow Geese Moulting Area, ECCC – #1	<ol style="list-style-type: none"> 1. Clarify how flights over the Snow Goose Moulting Area were classified, and how this is represented in reported rates of compliance. 2. Confirm whether the list of rationale for low level flights in Table 4.18 of the <i>2023 Annual Report</i>, and the rationale for close vertical flights in the TEAMR, have been accepted by the TEWG and the NIRB. 3. Record all flight non-compliance rationale in the next version of the TEMMP, which is currently under revision, and share that plan with reviewers. 	<ol style="list-style-type: none"> 1. Flights over the Snow Goose area include the 1,500 m horizontal buffer in July and August (moulting season). These flights are broken down into compliant, compliant with rational and non-compliant as described in Table 5-1 of the 2023 TEAMR 2. The list of rationale was discussed in January 2023 with the GN and presented and discussed at the February 2023 TEWG meeting. 3. The table of non-compliance rationale will be considered for inclusion in the next version of the TEMMP.
Eider Species and Mortalities, ECCC – #2	Mortality event of 13 King Eiders in 2023 were not captured in the 2023 TEAMR. ECCC recommended that Baffinland add the mortalities to the report and ensure to summarize, in future annual reports, any corrective measures taken following wildlife mortalities and whether any further mitigations are being proposed, considered, or implemented to reduce further mortality events.	The 13 King (not common) Eider mortalities were documented in section 11.1 (Wildlife Interactions and Mortalities) of the 2023 TEAMR. Regrettably, 'common eider' was incorrectly listed in the notification to ECCC in November 2023. A description of corrective measures following wildlife mortalities can be included in future monitoring.
Project-related ship track and sea ice information – Marine Birds, ECCC – #3	No information was provided on marine bird species attracted to ship tracks in ice as required by Term and Condition 103. Recommended that clarification should be included in future annual reports and were needed with a rationale for lack of data, to demonstrate full compliance.	Marine birds attracted to ship tracks in ice has not been observed or reported to date by any of MWOs. Baffinland noted that this has not been raised as any concern by Inuit community members or the MHTO but committed to include sightings of marine birds attracted to ship tracks in ice within the Annual Report.

TOPIC	ECCC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Program for Regional and International Shorebird Monitoring, ECCC – #4	Recommended re-initiating PRISM surveys to monitor shorebirds and provide an update on when the next PRISM surveys are planned as Baffinland committed to conduct these surveys every five (5) years and the last one was completed in 2018. This is part of Terms and Conditions 73 and 74, and Commitments #57 and 77.	Baffinland can discuss PRISM plot surveys with the CWS at their convenience. The intent was to support ECCC's ongoing PRISM monitoring program.
Avian Mortalities, ECCC – #5	Noted that comments ECCC #7 and ECCC #8 for the 2022 <i>Annual Report</i> have been resolved.	n/a
Comparison of monitored particulate matter with diameters of 2.5 microns (PM _{2.5}) concentrations with Canadian Ambient Air Quality Standards (CAAQS), ECCC – #6	Compare monitored PM _{2.5} concentrations with CAAQS, in addition to the already considered standards, as the CAAQS is formulated from health-based science. If the comparison had been made with the CAAQS, more exceedances might have been observed at both monitoring stations (Port Site Complex [PSC] and Mine Site Complex [MSC]), as the CAAQS is the more stringent standard.	Noted that both methodologies rely on 3 years of data and 2023 was the 2 nd year to monitor PM _{2.5} concentrations at both MSC and PSC; stations. A CAAQS PM _{2.5} concentration comparison will be made in the 2024 Annual Air Quality, Dustfall and Meteorology Report.
Issues at monitoring stations, ECCC – #7	Investigate the issues that prevented collection of monitored data at PSC and MSC monitoring stations and determine any lessons learned that would prevent recurrences of these.	Baffinland continues to work with Met-One to identify the cause of cold temperature 'air temperature sensor failures'. Will be getting backup air temperature sensors, additional pumps and wearable components to minimize equipment downtime.
Exceedances of monitored PM _{2.5} concentration, ECCC – 8	<ol style="list-style-type: none"> 1. Exceedances of monitored PM_{2.5} and total suspended particulates concentrations were reported in the air quality report and recommended that dust related best practices continue to be applied. 2. Implement a preventive approach framework based on trigger values with associated additional mitigation measure to ensure a reduction in air quality emissions trends over the years. 3. Provide information regarding the additional controls that will be implemented to limit the amount of fugitive dust that escapes during ore crushing and transportation activities. 	<ol style="list-style-type: none"> 1. Wants to re-assure ECCC that this is currently in development. 2. Currently conducting trials of both monitoring and mitigation tools to gain an understanding of the interrelation between all environmental factors and mitigation methods and their effectiveness. This information to be communicated once finalized. 3. Will continue to focus efforts on development of suitable, reliable, and consistent monitoring processes as well as mitigation methodologies in a unique Arctic environment. These require full testing and evaluation before finalizing a program with these elements.

TOPIC	ECCC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Inter-annual trends for air contaminants, ECCC – #9	Provide inter-annual concentrations trends for other relevant air contaminants as this would enable detection of trends and readjustments when necessary.	The inter-annual trend analyses as requested by ECCC were provided within the 2023 Annual Air Quality, Dustfall and Meteorology Report and the <i>2023 Annual Report</i> .
Incinerator stack testing, ECCC – #10	Recommended that segregation of incineration waste be conducted accordingly to the Incinerator Operation Procedure to limit the emissions of dioxins and furans.	Will continue to follow the Incinerator Operation Procedure during normal operations including recommendations provided by a third-party consultant. Will reemphasize to site personnel the importance of sorting garbage before it is incinerated. The performance source testing is scheduled to be conducted in August 2024.
Open Burning, ECCC – #11	Recommended that cardboard and untreated wood be incinerated or disposed of in another cleaner way instead of being open burned.	There is insufficient capacity in the incinerators to dispose of all untreated wood and clean cardboard generated onsite through incineration. Baffinland's Waste Management Plan (Rev 10) and Open Burning of Untreated Wood, Cardboard and Paper Products Procedure provides protocol of how wood (treated and untreated) and cardboard (clean and in contact with food).
Change in vessel type, ECCC – #12	Noted that using a larger vessel (Capesize) generally contributes to higher air quality contaminant concentrations over shorter periods (hourly, 24-hour), even if the annual average concentration may decrease. Recommended that the concentrations at the PSC station be analyzed regularly during the shipping season for any changes in vessel type during onshore wind conditions to assess whether any changes in air contaminant concentrations occur for shorter periods. If an upward trend is observed, further mitigation measures should be considered.	Baffinland undertook this analysis in 2023 at the request of ECCC and sent a memo titled Ambient Air Quality Monitoring – July to October 2023. Dated December 18, 2023.

TOPIC	ECCC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Erosion and sedimentation control measures, ECCC – #13	Noted that controlling erosion and sedimentation on site during freshet continues to be challenging. Uncontrolled seepage from the KM105 Surface Water Management Pond resulted in release of water with elevated TSS which potentially impacted sediment quality in downstream waters. TSS exceedances were also noted at the snow stockpiles and quarries. ECCC recommends Baffinland take proactive measures to prevent erosion and sedimentation in areas that are expected to generate runoff with high TSS.	Confirmed that all measures are being made to remediate the uncontrolled release of seepage from the KM105 Pond. Water management strategies will continue to be applied at other areas of high TSS release, including modifications to runoff diversion from the site access roads, to encourage settling. The implementation of the Project's Long Term Water Management Plan including the construction of a pond or sump upstream of Sheardown Lake Tributary 1 lower reach, will result in a significant improvement of the water quality reporting.
Investigation on quality of distilled water, ECCC – #14	Field and travel blanks for both the Surveillance Network Program surface water samples and the groundwater monitoring samples had an anomalously high number of parameters detected. Baffinland to promptly determine the source of detectable concentrations in the field and travel blanks and bring the necessary corrections prior to field sampling in 2024 with results and corrective measures described in the next annual report.	The suggested assessment has been initiated and a complete discussion will be included in the 2024 NIRB Annual Report.
Mitigation measures for mine related influences identified in CREMP, ECCC – #15	Recommended Baffinland propose mitigation measures to reduce mine impacts following their investigations of potential sources impacting water quality at SDLT-9, Sheardown Lake NW, and Sheardown Lake SE, as applicable.	The AEMP used for the reporting year was for rev 1, as rev 2 has not been approved yet and did not incorporate the TARP. Baffinland will use the approved version of the AEMP for the 2024 reporting year. Mitigation measures (TARP) are included in rev 2.
Suitable of wells installed in 2023 for groundwater monitoring, ECCC – #16	If groundwater wells installed in 2023 can be used to collect reliable data, Baffinland should discuss any corrective measures necessary on the wells and caveats that will be associated with the data. If wells are unsuitable for use, ECCC recommended the Proponent install new wells.	Baffinland is planning for additional well installations in 2024, with a focus on replacing any wells that do not provide reliable data, as well as installing new wells in areas previously identified as data gaps. In total 12-14 new wells are scheduled to be installed in August of 2024.

TOPIC	ECCC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Migration of contaminants in groundwater next to landfill, ECCC – #17	<ol style="list-style-type: none"> 1. Clarify why the landfill is no longer included as a potential source of contaminants to Sheardown Lake in the CREMP Report. 2. Specify a timeline for completion of the contaminant transport model. 3. Clarify if any of the proposed potential mitigation measures for preventing contaminant migration through groundwater from the landfill to Sheardown Lake will be implemented, and if so, provide a timeline. 	<ol style="list-style-type: none"> 1. Additional data is needed to inform potential source pathways into Sheardown lake. 2. Future data collected during annual groundwater monitoring programs will be incorporated into the model to further refine model assumptions to improve certainty of model predictions. 3. Should monitoring indicate migration of contaminants to Sheardown Lake, the proposed mitigation measures will be revisited, and implemented strategically based on a full assessment of the model outcomes to ensure selection and implementation of suitable mitigation measure(s).

Table 3-8: Fisheries and Oceans Canada Comments and Baffinland's Response for the 2023 Annual Report for the Mary River Project.

TOPIC	DFO'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Interpretation of the 2023 narwhal abundance estimated in a delayed shipping season, DFO – #1	It is premature to reduce the survey frequency and DFO recommended maintaining annual aerial surveys of the RSA during the open water season (leg 2) to identify longer-term trends that subsequent surveys during following years could detect and until the results of the 2023 DFO aerial survey of the Baffin Bay narwhal population are published.	Baffinland plans to conduct narwhal aerial surveys during the open-water season (Leg 2) on a three-year cycle. This cycle exceeds the frequency of DFO's regional narwhal aerial surveys, which are undertaken to monitor the population health of all narwhal stocks in the Eastern Canadian Arctic. Further, narwhal in the Eastern Canadian Arctic were recently downlisted from <i>Special Concern</i> to <i>Not at Risk</i> status by the Canadian Committee on the Status of Endangered Wildlife in Canada. Baffinland therefore assumes that monitoring a subset of the overall population (Eclipse Sound and Admiralty Inlet socks) once every three (3) years should be adequate for monitoring and managing this sub-population in light of Baffinland shipping operations.

TOPIC	DFO'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Pre-Project Related Impact Baseline, DFO – #2	DFO takes the position that the baseline for narwhal populations in Eclipse Sound should be the abundance estimate completed in 2004, before there was shipping activity related to the Mary River Mine. DFO therefore recommends that Baffinland use the 2004, pre-project, abundance survey as the baseline for the narwhal population.	It is presently unclear why DFO based their analysis on a different and outdated shipping dataset when they were provided with the updated 2002-2013 shipping data from WSP in 2023. WSP conducted an equivalent analysis to that undertaken by DFO using the appropriate shipping dataset and ran two scenarios with the model. The analyses suggested that when accounting for narwhal only responding to shipping that occurred prior to the aerial surveys, the breakpoint at shipping levels is 2014. The narwhal survey in 2013 occurred prior the break and therefore is appropriate to be used as a baseline. Baffinland takes the position that the baseline for narwhal populations in Eclipse Sound should be the abundance estimate completed in 2013.
Non-Indigenous Species/Aquatic Invasive Species (NIS/AIS) Watchlist and species identification, DFO – #3	Robust baseline sampling of species presence before project related activities should be identified and species detected before project activities begin. Recommended Baffinland: <ol style="list-style-type: none"> 1. Use of biogeographic information in combination with knowledge of circulation patterns to better develop criteria for “surrounding region” and distribution categories. 2. Continue to work with DFO to revise and improve detection of potential NIA/AIS as well as continued investigation into the long-term effects of the introduction of non-indigenous species and the cumulative effects on the biome, and the development of future mitigation and avoidance of introducing further non-indigenous taxa into Milne Port and Steensby Port. 	<ol style="list-style-type: none"> 1. The 2023 MEEMP/AIS report included a list of ecoregions where taxa were previously recorded, using the Marine Ecosystems of the World biogeographic classifications. Baffinland is currently collaborating with the University of New Brunswick to conduct a taxonomic study of macroalgae at Milne Inlet. New information on taxonomic records, biogeography and circulation patterns is considered each year and the presence of taxa on the Watch List is reassessed annually in this context. 2. Baffinland welcomes ongoing collaboration with DFO to continue to improve NIS/AIS management at Milne Port and the future Steensby Port.

TOPIC	DFO'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Noise, DFO – #4	Baffinland is using 120 decibels (dB) as the general marine noise threshold, the absence of species-specific thresholds. DFO would like to see the 100 dB level included in reporting to provide a comparison of marine mammal reactions and behaviour at 100 dB to provide a precautionary approach and potentially develop a more species-specific noise threshold.	The threshold used for assessing behavioural disturbance in the marine mammal effects assessments, and corresponding monitoring programs, is based on the most up-to-date regulatory threshold. Currently, there is no regulatory guidance from the Canadian Government and DFO defining an alternate threshold that would be more appropriate than the 120 dB SPL threshold. Acoustic monitoring and behavioural response data collected to date as part of Baffinland's annual monitoring programs have not provided any evidence for a more appropriate threshold for narwhal than the one currently in place. Baffinland will continue to apply the best available regulatory guidance, including any revised guidance that becomes publicly available.
Works impacting Freshwater, DFO – #5	Review and follow DFO's <i>Projects Near Water</i> website that provides current guidance for avoiding impacts to fish and fish habitat including <i>Codes of Practice</i> . If the <i>Standards and Codes of Practice</i> cannot be followed, any works in fish habitat or on watercourses should be submitted to DFO for review.	Baffinland will continue to submit plans to DFO for review if DFO <i>Standards and Codes of Practice</i> cannot be followed for in-stream work in fish habitat.
Alluvial delta complexes and shoreline sensitivity, DFO – #6	Information is required to fully understand the alluvial delta complexes and shoreline sensitivity analysis. DFO requested that Baffinland respond to the following: <ol style="list-style-type: none"> 1. What is Baffinland's definition of alluvial delta complex? 2. Confirm whether there are other delta complexes other than Phillips Creek within the study area, and whether these areas have been assessed for potential sensitivity. 3. Has spill trajectory modeling been undertaken in the study area? If so, what wave, tide and current parameters were used? What were the results? Were they incorporated into the sensitivity analysis? 	<ol style="list-style-type: none"> 1. The selection of which shore types to use for Milne Inlet was based on the shoreline habitat classification work completed by CORI in 2007. Baffinland has retained a third-party consultant to review and update the Spill at Sea Response Plan (SSRP). 2. Baffinland will provide an update following the third-party consultant's review of the SSRP. 3. Fuel spill trajectory modelling was completed for the Northern Shipping Route. Winds and currents are the primary physical environmental drivers. Waves and tidal currents were not considered in the model. Results of the model include spill

TOPIC	DFO'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
		probability maps and statistics of the percent of trajectories ashore, and minimum and maximum times to shore.
Net environmental benefit analysis, DFO – #7	DFO requested support documents to be provided to fully understand why the net environment benefit for attempted restoration of the Milne Inlet shores would be detrimental.	The Shoreline Cleanup Assessment Technique released by ECCC in 2018, provides that the best practice in most cases for this type of shoreline is a natural recovery.
Consistency in wind speed description, DFO – #8	Describe wind speeds in a consistent manner throughout the Oil Pollution Emergency Plan (OPEP).	Baffinland will make this revision to reflect DFO's recommendation in the next update to the OPEP.
SSRP – Cape sized vessel, DFO – #9	Update Table 11-1 in the <i>2023 Annual Report</i> and risk assessment to capture the current shipping regime of ship size being used.	Baffinland will make this revision to reflect DFO's recommendation in the next update to the SSRP.
SSRP – Steensby, DFO – #10	A response plan should be developed for the southern route prior to construction and ensure capacity is in place for spills at sea regarding Steensby operations.	Baffinland will develop a SSRP for the Southern Shipping Route prior to the beginning of construction of the Steensby Component of the Project.
SSRP – Coast Guard Contacts, DFO – #11	Update contact list for the Canadian Coast Guard and update region to Canadian Coast Guard Arctic Region.	Baffinland will make this revision to reflect DFO's recommendation in the next update to the SSRP.

Table 3-9: Health Canada’s Comments and Baffinland’s Response for the 2023 Annual Report for the Mary River Project.

TOPIC	HC’S RECOMMENDATIONS	BAFFINLAND’S RESPONSES
Use of the Canadian Ambient Air Quality Standards (CAAQS), HC – #1	<ol style="list-style-type: none"> 1. Ensure monitoring results are compared against current published CAAQS values to reduce potential health risks from exposure to project related emissions. 2. Include additional information and details on efforts to reduce project related emissions when elevated concentrations of nitrogen dioxide [NO₂] are observed during monitoring. 3. Adding additional detail on the comparison of monitoring results to those from previous years to future monitoring reports would further describe potential trends and help inform decisions related to management and mitigation measures. 	<ol style="list-style-type: none"> 1. The 2024 Annual Air Quality, Dustfall and Meteorology Report will reflect the CAAQS values in the analysis, as recommended. 2. Provided an update current analyses as requested comparing the 3-year average of the annual 98th percentile of the daily maximum 1-hour average concentrations for the MSC and PSC to support a comparison to the CAAQS, as requested. 3. Baffinland continues to work towards reducing ambient NO₂ and sulphur dioxide concentrations. Additional detail on the comparison of monitoring results to those from previous years will be provided in the 2024 Annual Air Quality, Dustfall and Meteorology Report to further describe potential trends, as recommended.
Reporting on non-threshold air contaminants, HC – #2	<ol style="list-style-type: none"> 1. Recommended the use of CAAQS for particulate matter (PM_{2.5}) and ongoing efforts to limit emissions of non-threshold air quality contaminants to the extent possible. 2. Supports implementing all economically and technologically feasible mitigation measures to limit emissions of non-threshold air contaminants. 	<p>Provided a PM_{2.5} CAAQS comparisons (annual and 24-hour) for monitoring data collected at MSC and PSC during 2023 noting that the comparison will also be included in the 2024 Annual Air Quality, Dustfall and Meteorology Report.</p>
Inappropriate guideline used to assess mercury levels in fish tissues, HC – #3	<ol style="list-style-type: none"> 1. Use of the provisional tolerable daily index values and consumption patterns consistent with subsistence harvesting by local Inuit communities to assess mercury in country foods, and specifically fish tissues. 2. Describe the limitations and risks of comparing monitoring results to HC’s guideline value for commercial foods (i.e., 0.5 mg/kg wet weight) in the MEEMP guideline comparison. 	<p>The objective of the MEEMP is to monitor for potential changes in the environment as a result of the Project and evaluate whether the marine environment is changing over time. It is not the objective of the MEEMP to assess human health risks associated with eating country foods (i.e., fish) from Milne Port. As such, Baffinland believes the guideline is appropriate to use for assessing annual MEEMP results.</p>

Table 3-10: Parks Canada’s Comments and Baffinland’s Response for the 2023 Annual Report for the Mary River Project.

TOPIC	PC’S RECOMMENDATIONS	BAFFINLAND’S RESPONSES
Interpretation of the 2023 narwhal abundance estimated in a delayed shipping season, PC – #1	Disagreed with Baffinland’s assessment that shipping in 2023 did not affect narwhal abundance in Eclipse Sound as the start of the shipping season was delayed and aerial surveys were completed early on in the shipping season not capturing the true impacts from the Capsize ore carriers arriving in Milne Inlet. PC recommended maintaining annual aerial surveys of the RSA during the open water season to see if there may be longer-term trends that subsequent surveys during following years could detect and until the results of the 2023 DFO aerial survey of the Baffin Bay narwhal population are published.	The intent of the marine mammal aerial survey program is to monitor changes in population abundance estimates and not to inform on in-year narwhal behavioural changes as a result of shipping operations. All of the monitoring data collected clearly indicates that when narwhal react to vessels, this occurs at close range (1-5 km). Narwhal have not been observed leaving the RSA as a result of in-year shipping operations. Further, the open-water aerial surveys used to determine narwhal abundance need to be conducted in mid-August as per existing DFO survey methodology. Baffinland do not recommend delaying the open-water surveys to later in the year as this would capture narwhal numbers outside of their summer resident period.
MEWG decision-making process, PC – #2	Notes that the decision of changing the program frequency for marine monitoring programs in Milne Port and along the Northern shipping route was not consensus-based involving other members of the MEWG. This is not in compliance with Term and Condition 101, nor does it adhere to the decision-making process of the MEWG. PC recommended that Baffinland follows the same term of reference process and dispute resolution established for the MEWG before modifying/stopping the currently accepted mitigations or monitoring programs.	Noted that a <i>draft</i> 5 year monitoring plan was provided at the May MEWG meeting for discussion with a follow-up meeting held in June to further discuss the proposed plan and concerns raised by members. While there isn’t an opportunity to conduct Leg 1 or Leg 2 aerial surveys in 2024 (due to plane availability), Baffinland is open to working with the MEWG should they wish to put forward a formal recommendation grounded in sound rationale for why Baffinland should continue annual aerial surveys. Changing to a three-year frequency will also enable Baffinland to prioritize other monitoring work for the Steensby component of the Mary River Project.

TOPIC	PC'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES
Aerial surveys for marine monitoring, emergency response or search and rescue purposes are not subject to the restrictions under Term and Condition 150, PC – #3	Noted that WSP misunderstands the flight restrictions set out in Term and Condition 150 and that narwhal aerial surveys are not subject to the flight restrictions. PC would like to reinforce its support of aerial surveys and appropriate protocols and recommends that WSP correct their misunderstanding.	Baffinland notes that the language used by the PC to advise the public of flight altitude restrictions in the Tallurutiup Imanga National Marine Conservation Area and in Sirmilik National Park do not clearly indicate that certain parties (or industry) are exempt from these restrictions (and how this is determined).

Table 3-11: Oceans North's Comments and Baffinland's Response for the 2023 Annual Report for the Mary River Project.

TOPIC	OCEAN NORTH'S RECOMMENDATIONS	BAFFINLAND'S RESPONSES ⁹
Significance of issue regarding narwhal population, ON – #1	The arbitrary selection of a baseline and the exclusion of valuable data by the Proponent suggests that there has been no change in the narwhal population, which Inuit have stated is not the case. The decision on where the narwhal population stood prior to project shipping lies with the regulators as opposed to the Proponent	Noted that the selection of 2013 as a baseline year was not an arbitrary process and based on detailed statistical analysis. Baffinland disagrees with Oceans North's statement that Baffinland excluded valuable data from its reports which suggested that there has been no change to the narwhal population. Baffinland has quantified how the population of the Eclipse Sound and Admiralty Inlet narwhal summer stocks has changed over the last two decades, both preceding and during Project shipping operations, including abundance estimates for 2004 and 2013.
Model narwhal population trend on all data available, ON – #2	Use all narwhal survey population estimates with their associated error estimates to model the local population trend. Referred Proponent to Biddlecombe et al. (2022) ¹⁰ for an example on modelling that uses survey estimates.	In addition to the comparison noted by Oceans North, Baffinland also conducts a trend analysis that includes all years of data collected in Eclipse Sound and Admiralty Inlet. As Oceans North suggested, Baffinland in fact does follow

⁹As many of Oceans North's Comments on Baffinland's 2023 Annual Report were part of an ongoing discussion from the Marine Environment Working Group in June 2024, Baffinland provided a Technical Memo Response on September 23, 2024.

¹⁰ Biddlecombe, B.A, and C. Watt. 2022. Modeling population trajectory and probability of decline in northern Hudson Bay narwhals (*Monodon monoceros*). *Marine Mammal Science* (1): 1-14.

		<p>the better practice of using all survey population estimates. Noted that Baffinland is responsible to monitor for Project effects on receptors of concern in the RSA and therefore the baseline should be reflective of when Project effects were likely to start occurring. It is unreasonable to enforce upon a proponent a duty to monitor long-term population trends beyond a Project's operational timeline, particularly when there is limited information on the various other external stressors, such as climate change, harvesting, sea ice levels, prey availability, etc.</p>
Baseline selection of 2013 narwhal data is flawed, ON-3	<p>Include the first population estimate from 2004 as baseline data not data from 2013. Noted that Project ships move into critical narwhal habitat (Milne Inlet) while non-project ships do not and mainly go through to Mittimatalik alone and exit out of Navy Board Inlet or back into Baffin Bay.</p>	<p>Noted that Baffinland is not excluding the 2004 population estimate from its reporting; it is just not using 2004 as the baseline (reference) year for Project effects monitoring for the previous reasons mentioned. Based on available IQ, it is understood that narwhal calving grounds exist through all marine waters of the RSA and adjacent marine areas. This information conflicts with Oceans North's suggestion that narwhal habitat in Milne Inlet is more important than others.</p>
Eclipse Sound/Milne Inlet narwhal population, ON – #4	<p>Eclipse Sound/Milne Inlet needs to be assessed on its own, not as a comparison to a location where narwhal are not disturbed (Admiralty Inlet). Oceans North believes that the determination of the appropriate method for assessing the narwhal population estimate is important not only for the projects associated with shipping out of the northern route, but for any future developments of the Mary River Mine, including the Steensby operations.</p>	<p>Oceans North's comment that 'Eclipse Sound/Milne Inlet needs to be assessed on its own, not as a comparison to a location where narwhals are not disturbed' fails to acknowledge the benefit of having a valuable reference control site where shipping levels have remained low and consistent throughout the last two decades.</p>

3.4 NIRB Monitoring

The NIRB understands that several portions of the Project have still not been fully realized and that consequently some terms and conditions cannot be fully achieved until later phases of the Mary River's development. The NIRB expects that planning, consultation, and collaboration will continue over the next year to finalize and refine management and monitoring plans and will work to finalizing the PIAMP in the future.

3.4.1 *MARINE MONITORING AND MARINE MITIGATION WORKSHOP*

On August 12, 2024 the NIRB scheduled a Marine Monitoring and Marine Mitigation Workshop for September 5, 2024 in conjunction with a Community Information Session in Pond Inlet. After the announcements, key Parties reached out to the NIRB to notify that due to scheduling conflicts, they would be unable to attend the workshop. As a result, the NIRB concluded that if hosted, the Workshop would be unable to meet its intent. The Board has deferred this workshop until a later date in 2025 when all Parties can participate effectively.

3.4.2 *PERFORMANCE AUDIT WORKSHOP*

Term and Condition 179 was added to the Mary River Project Certificate in October 2018 as required by the Responsible Ministers, when they approved the Production Increase Proposal Amendment "to ensure that all commitments made by the proponent with respect to the Production Increase Proposal and delivery of benefits to Inuit are adhered to and can be determined through a body of evidence".

In December 2019, Baffinland applied to the Board for the Extension Request proposal. Following the receipt of the Board's recommendation on the Extension Request, the Responsible Ministers consulted with the QIA and received concern that Term and Condition 179 is not currently providing adequate certainty regarding the submission deadlines for the performance audits and that the content of the current audits has not met the "spirit and intent" of the commitments made by the Proponent. As a result, Term and Condition 179 was varied by the responsible Ministers to direct Baffinland to submit their bi-annual performance audits on March 31st and September 30th each calendar year. Further, the NIRB was directed to host a workshop to clarify the scope of the performance audits and to ensure that the audits meet their intended purposes.

Since the issuance of Project Certificate No. 005, Amendment No. 03, the NIRB has been unable to host the workshop. The Board has corresponded with Parties on multiple occasions in recent years announcing the anticipated dates to host the workshop, and has received correspondence from the Government of Canada, the Qikiqtani Inuit Association and Baffinland indicating that there was an immediate need for those Parties to continue their focus and ongoing work towards the development of a Project Monitor position for the Mary River Project, prior to the NIRB continuing with the planning for the Audit workshop. In order to allow the Government of Canada, the QIA and Baffinland space to discuss and establish the Project Monitor Position for the Project, the Board has deferred this workshop until further notice. The NIRB is currently waiting for an update regarding the development of the Project Monitor, at such a time, it will work with the Parties involved to re-evaluate the need for an audit workshop for the Mary River Project and how it will work in conjunction with the Project Monitor position.

3.4.3 CUMULATIVE EFFECTS FRAMEWORK WORKSHOP

The NIRB conducted a Cumulative Effects Assessment Framework Workshop in Iqaluit on February 19-20, 2024 as directed by the Responsible Ministers in October 2023 in their decision letter in relation to Baffinland's SOP. The relevant direction from the Responsible Ministers was as follows:

...the responsible Ministers and I request the Board host a multi-party workshop in order to establish the components and set the parameters of a comprehensive cumulative effects assessment of the Mary River Project. The workshop should include representatives from Baffinland, the Designated Inuit Organizations, Hunters and Trappers Organizations from impacted communities, the Government of Nunavut and the Government of Canada¹¹.

The NIRB released a Follow-up Report regarding the Cumulative Effects Assessment Framework Workshop in April 8, 2024 to the Minister of Northern Affairs, and provided the following recommendations to improve cumulative effects assessment of the Project and subsequent reconsiderations in the short-term, medium-term and long-term:

1. **Improvements to the assessment of cumulative effects in the SOP2 amendment application:** The Board will determine whether commitments made by the Proponent to update the approach to cumulative effects assessment are sufficient to support the assessment of the SOP2 amendment application, and if not, the NIRB will issue additional guidance.
2. **Identification of improvements to the monitoring and assessment of cumulative effects for the approved Project:** Following the completion of the assessment process for the SOP2 amendment application (or in parallel, depending on process and timelines) the Board proposes commencing an evaluation of the existing Mary River Project monitoring program (with the continued participation of the Workshop participants) to identify improvements and to consider whether updates to the existing Project Certificate terms and conditions or further direction on the effective implementation of the existing Project Certificate terms and conditions are needed to address concerns about potential cumulative effects associated with existing operations or for those project components that are approved under the current Project Certificate but that have yet to be constructed (e.g., the southern railroad and the port at Steensby Inlet).
3. **Development and incorporation of the CEA Framework to guide future assessments:** The Board, in collaboration with a new CEA-focused multi-party committee as referenced above (or if not a formal committee, informed by consultations with relevant stakeholders) develop an updated CEA Framework to support the consideration of future assessments. (It is the Board's expectation that this work for the Mary River Project will likely parallel and support the current work of the Board in the development of Standard Impact Assessment Guidelines and may become incorporated into the finalized Standard Impact Statement Guidelines when complete).

¹¹ NIRB Doc ID: 347422 & 347500.

In conclusion, the NIRB noted that it believes the CEA Framework, once finalized, can inform and support this on-going work, including updating the sections of the Standard Impact Statement Guidelines addressing cumulative effects, and this work will guide future applications not only from Baffinland in relation to the Mary River Project, but all other project proponents across the Nunavut Settlement Area.

3.4.4 COMPLIANCE WITH NIRB PROJECT CERTIFICATE

The NIRB's comprehensive assessment of the Project Certificate is provided in [Appendix I](#). During the 2023-2024 reporting period, the Proponent provided the require plans, information and programs required under in the Project Certificate. Non-compliances are noted, and where appropriate, brought forward as part of this year's recommendations to the Proponent. However, the Board acknowledges the efforts of Baffinland to date in improving compliance with these terms and conditions, noting where Baffinland has not yet met compliance, has plans, goals, and dates in place to achieve this. In addition, newer terms and conditions such as Term & Condition 188, are in early stages and require additional time to yield results and the Board expects to see those outcomes starting in the coming years.

3.4.5 NIRB SITE VISITS

The NIRB carried out three (3) site visits during the October 2023 to September 2024 Monitoring Period to determine whether, and to what extent, the land or resource use in question was being carried out within the predetermined terms and conditions as set out in Project Certificate 005 Amendment 05. The intentions of the first site visit that occurred from October 3- 5, 2023 were to observe ongoing ship loading and shipping activities. The intentions of the second site visit that occurred from April 23 to 24, 2024 were to observe freshet preparations, the updated dust mitigations and any new developments at site. The third visit occurred from September 17-20, 2024 and was intended to observe the active ship loading activities, dust mitigations, follow-up on culvert remediation and general project operations.

Observations were provided following the site visits and further details can be found in the October 2023 Site Visit Report¹², the April 2024 Site Visit Report¹³ and the September 2024 Site Visit Report¹⁴. [Appendix I](#) further details where site visit observations were considered in compliance of the Project Certificate. Based on the observations made during the site visits, all Mary River facilities continue to be well managed, and are maintained with adequate environmental protection measures and procedures in place.

During the October 2023 site visit, the NIRB staff noted that additional trials were ongoing to explore alternative options for dust suppression and the NIRB looks forward to hearing further updates regarding the active air monitoring devices, dust suppressant at the Crusher Facility as well as plans for moving the Phase 2 Development Project Equipment to Mine Site to be repurposed. During the April and September 2024 site visit, NIRB staff noted that Baffinland is conducting trials to explore alternative options for dust suppression and mitigation. In addition, the NIRB staff noted concerns regarding hazardous waste being stored outside of secondary

¹² NIRB Doc ID: 347459.

¹³ NIRB Doc ID: 350073.

¹⁴ NIRB Doc ID: 352735.

containment as well as additional clearing of snow around the snowmobile crossing. In discussion with Baffinland staff, these concerns were addressed and the NIRB expects these to be closely monitored and plans to be strictly adhered to in the future.

3.4.6 PUBLIC INFORMATION SESSION

Due to Scheduling conflicts and logistical constraints, the NIRB did not conduct any public information sessions during the 2023-2024 monitoring period but will provide community members of Pond Inlet and Igloolik with an update on mine activities as well as engage with community members on any questions or concerns related to the Project as soon as practicable.

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Monitoring Officer Findings

Baffinland has provided the required reporting under the Project Certificate, and as applicable to the current operations phase of the project; however, Monitoring Officers have noted where additional information has not been provided in respect of the following aspects of the applicable Terms and Conditions and/or as required under applicable management plans or monitoring programs.

1. Board staff noted that as part of Baffinland's response to parties' comments on the *2023 Annual Report*, Baffinland would be providing follow-up analysis and updates to specific inquiries. Board staff expect these commitments to be tracked by Baffinland and suggests a summary table be provided withing the 2024 Annual Report to the Board.
2. In the 2022-2023 Monitoring Report, the NIRB requested the results of the caribou aerial surveys be provided as soon as practicable. In the 2023 Annual Report, Baffinland highlighted the considerable efforts made to expand caribou monitoring in 2023, including completion of a caribou aerial survey; however, no results were reported Section 9.5 of the Aerial Caribou Survey of Appendix G.5.1 of the 2023 Annual Report. NIRB staff look forward to hearing the results of these surveys as part of the 2024 Annual Report.
3. T&C 106 states that Baffinland shall ensure that shipboard observers are employed during seasons where shipping occurs and provided with the means to effectively carry out the duties. Baffinland noted that for the 2023 shipping season, shipboard observers were only hired for a 10-day period during the fall program using the Icebreaking vessels and that Baffinland continues to partner with the Marine Mammal Observation Network (MMON) to meet the intent of this term and condition. NIRB understands that during COVID-19 it was not possible to hire shipboard observes; however, now that the same barriers do not exist, Baffinland should aim to employ shipboard observers during all seasons and conditions. NIRB staff requests Baffinland provide an update on how it intends to expand this program and meet intent of T&C 106.
4. Term and Condition 187 requires the Proponent to complete an annual audit of dust impacts and mitigations associated with project activities by a third party and to provide a report to the NIRB no later than January 31st of each year. The dust audit was completed by Nunami Stantec with the involvement of the five (5) North Baffin communities and an update was submitted to the NIRB in February 2023. In May 2024, Baffinland submitted

correspondence providing a table with the status of the recommendations as outlined in the Recommendations Report from 2023; however, the Board has not received a finalized report outlining the committee's work for 2023. This was discussed with the Board through 2024, however a final report was unable to be provided and it was acknowledged that the update would serve as information for the 2023 year with a report being submitted for the following year. NIRB Staff are expecting a completed annual audit of dust impacts and mitigations associated with project activities by January 31st 2025.

5. Baffinland noted that perching culverts and blockages have been recurring at some culverts and in 2023 fish passage issues were reported at 17 of the 49 fish-bearing crossings assessed with some of the issues been ongoing and without remediation since at least 2020. The culverts have been addressed on an annual basis; however, there has not yet been a long-term solution in place. In 2022, DFO ordered Baffinland to take corrective action on several culverts along the Tote Road. During the September 2024 Site Visit, NIRB staff were notified that several of these repaired culverts had failed and needed to be repaired again. As this work is ongoing, NIRB staff are requesting a fulsome update in the 2024 Annual Report discussing the progress of these culvert repairs, lessons learned and a clear timeline for completing the work.
6. Currently, Baffinland is using DFO's 2013 data as the baseline data for narwhal abundance estimates when it has been recommended to Baffinland to use the 2004 data for the Eclipse Sound narwhal stock and use this data as the pre-project related impact baseline data. DFO has questioned Baffinland's use of 2013 as the baseline year for narwhal abundance, and QIA, along with other parties in the MEWG, also questioned the use of the 2013 narwhal abundance data as baseline. The Board notes that project related shipping in Eclipse Sound has been ongoing since 2006 and construction of the project started in 2013; with a significant increase in regional vessel traffic due to Baffinland shipping starting at that time. The NIRB further notes that baseline conditions for Project assessments are pre-project activities; ongoing monitoring data that is collected is useful data to help determine trends, potential project effects and efficacy of mitigation measures as the Project evolves, however, the results of further monitoring should be considered in the context of the original baseline data as well.
7. The NIRB notes that ship hull surveys of vessels coming into Milne Port have not been conducted since 2020 which is a requirement under Term and Condition 91. Baffinland noted that all vessels procured for the Project comply with the IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships and the iron ore carriers commissioned for operations will be undertaking international voyages which will also require an International Anti-fouling System Certificate. The NIRB understands Non-Invasive Species (NIS)/Aquatic Invasive Species (AIS) surveys were conducted for Milne Inlet and that monitoring for NIS/AIS at Milne Inlet is one component to prevent impacts to marine quality; however, monitoring of ships prior to entry to Steensby Inlet and Milne Inlet is important to prevent introduction of aquatic invasive species especially in areas where the anti-fouling might be failing or where biofouling growth. NIRB staff note that the Proponent provide a discussion on how it will meet the requirements of T&C 91

including conducting underwater surveys of the hulls of the ore carriers every shipping season (for both Milne Inlet and Steensby Inlet).

8. It is noted that Baffinland did not conduct aerial narwhal abundance surveys in 2024 and have suggested reducing the surveys from annual to a 3-year schedule rather. Baffinland asserted that based on the 2023 aerial surveys, vessel traffic has not affected narwhal abundance and distribution. The Monitoring Officer notes that aerial surveys have been a key monitoring tool that tracks changes in narwhal abundance and provides information to inform adaptive management and mitigation. The NIRB does not yet see enough evidence to modify the status quo of annual aerial surveys that has been established in recent years.

4.2 Board Recommendations

Baffinland continues to apply mitigation measures to the dust generated at site through the application of liquid dust suppressant at the crusher facility. This is currently only being trialed at one (1) of the three (3) crushers; however, Baffinland has indicated positive results.

Recommendation 1: Baffinland provide a plan and timeline for using the liquid dust suppressant across all three (3) crushers at site with the 2024 Annual Report. The plan should also include a projected timeline for when monitoring would allow for better understanding of dustfall at site and when it is anticipated to fall within FEIS Addendum estimates.

As noted in the previous NIRB monitoring report, considering the commitments made by Baffinland, their response to the NIRB's request from the 2022-2023 monitoring period noted that the last *draft* TOR for the MEWG was circulated to the working group in April 2023 with comments received on May 5, 2023. The most recent revised draft is still under internal review and will be finalized following final comments from the working group members and provided to the NIRB by early Q2 of 2024.

Recommendation 2: The Board expects the Proponent to complete the Terms of Reference for the MEWG and TEWG as well as the implementation of the third-party chairperson along with the submission of the 2024 Annual Report.

5.0 CONCLUSION

Pursuant to Sections 12.7.2 and 12.7.3 of the *Nunavut Agreement* and ss. 135(3) and 135(4) of the *NuPPAA*, the NIRB will continue to work with Baffinland and other regulatory authorities in order to provide the required evaluation of monitoring efforts, results and compliance as outlined within the Board's project-specific monitoring programs and in accordance with the requirements set out in the Mary River Project Certificate 005 Amendment 05.

During the 2023-2024 monitoring period, Baffinland demonstrated compliance with the majority of the applicable requirements of the Mary River Project Certificate. Further, the Proponent is meeting the objectives of monitoring and mitigation plans and procedures put in place for the Project. The Board looks forward to hearing updates from Baffinland, Authorizing Agencies, and other Parties in the coming monitoring year as it continues to track compliance.

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Date: March 11, 2025
Signature:

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Title: Director, Operations
Date: March 11, 2025
Signature:

Tara Arko

Appendix I: Compliance with the Terms and Conditions and Commitments of Project Certificate No. 005 Amendment 05

Glossary:

In Compliance: The Proponent has fulfilled its obligations described under the term and condition as set out in the Project Certificate for the monitoring period.

Deficient – in progress: Proponent has partially fulfilled its obligations described under the term and condition as set out in the Project Certificate for the monitoring period.

Non-Compliance: Proponent has not met its obligations described under the term and condition as set out in the Project Certificate for the monitoring period.

Not Yet Active: The term and condition is not active to the current phase of the Project in this monitoring period.

Board Guidance on General Regulatory and Administrative Responsibilities

Requirement	Compliance Achievement 2022-2023	Compliance Achievement 2023-2024	NIRB Comment
1. Appointment of Monitoring Officer(s)	Active In Compliance	Active In Compliance	Completed by NIRB, with oversight by the Manager, Project Monitoring.
2. NIRB to report annually on the monitoring program (in English and Inuktitut)	Active In Compliance	Active In Compliance	Completed by NIRB within this report
3. NIRB to conduct periodic community meetings updates regarding its Monitoring Program	Active In Compliance	Active In Compliance	NIRB completed a Community Information Session in Pond Inlet in May 2023. No community information sessions were held for the period of October 2023 to September 2024.
4. NIRB to schedule periodic site inspections.	Active In Compliance	Active In Compliance	Three (3) site visits occurred in the 2023-2024 Monitoring Period; October 2023, April 2024 and September 2024.
5. Proponent must obtain all required federal and territorial permits and other approvals and shall comply with the requirements of such regulatory instruments.	Active In Compliance	Active In Compliance	Baffinland has included items in its 2023 Annual Report.
6. Duty to Comply with environmental laws and regulations and/or regulatory instruments, prompt action to remedy non-compliance and report any non-compliance.	Active In Compliance	Active In Compliance	Baffinland has included details in its 2023 Annual Report. Baffinland is actively working with DFO, CIRNAC and other parties regarding regulatory compliance with additional management plans being provided to meet concerns identified by DFO regarding culverts along the Tote Road. Further details can be found in Section 2.1.1 .
7. Posting of adequate performance bonding.	Active In Compliance	Active In Compliance	Currently being reviewed by the Nunavut Water Board under the project Type A Water Licence.
8. Information requirements for monitoring reporting.	Active In Compliance	Active In Compliance	
9. Make monitoring results available in English and Inuktitut, to the extent feasible.	Active In Compliance	Active In Compliance	Included in the 2023 Annual Report and at Baffinland's website www.baffinland.com .
10. Maintain records, including results, of all Project-related monitoring data and analysis for the life of the Project, including closure and post-closure monitoring.	Active In Compliance	Active In Compliance	
11. Maintain the Final Environmental Impact Statement (FEIS) and environmental effects monitoring programs developed for the Project as new information is collected and update predictions.	Active In Compliance	Active In Compliance	Baffinland submitted updated plans and posted these on their website as well as provided them directly to the Board's Public Registry.
12. Establish Project-specific web portal or web page to make available all non-confidential monitoring and reporting information submitted to regulatory authorities	Active In Compliance	Active In Compliance	Baffinland website (www.baffinland.com) completed and updated regularly with monitoring plans, reports, and results.
13. Provide on-going opportunities for consultation and comment on any substantive revisions to the Project-specific monitoring program,	Active In Compliance	Active In Compliance	The NIRB notes that this is largely completed through the Project Working Groups which are currently reviewing their Terms of Reference.

Requirement	Compliance Achievement 2022-2023	Compliance Achievement 2023-2024	NIRB Comment
modelling, studies, management plans, management measures, and reporting.			
14. To the extent feasible, the NIRB will provide an opportunity for comment on any substantive revisions to the Project-specific monitoring, modelling, studies, management plans, management measures, and reporting provided by the Proponent under the Project Certificate.	Active In Compliance	Active In Compliance	Completed by NIRB. Interested Parties provided comments on the 2023 Annual Report on July 4, 2024 and the Proponent provided a response on August 9, 2024.

Project Specific Terms and Conditions

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
1. GPS monitoring or similar with tidal gauge monitoring of sea levels and storm surges at Steensby Port and Milne Port (<i>Ports</i>).	<i>Milne Inlet</i> : Active In Compliance	<i>Milne Inlet</i> : Active Deficient – In Progress	Related to Term and Condition 83. Baffinland paused monitoring for Milne Port in order to consult the Marine Environment Working Group (MEWG) on methods to meet the term and condition.
	<i>Steensby Inlet</i> : Active Deficient – In Progress	<i>Steensby Inlet</i> : Active Deficient – In Progress	Oceanographic data collected in 2021-2022 with the Oceanography Report provided for Steensby Inlet.
2. Validation and update of climate change impacts of the project on the local study area (LSA) and regional study area (RSA).	Active In Compliance	Active In Compliance	Updated Climate Change Strategy was finalized in March 2023. Baffinland continues to work on implementing initiatives.
3. Provide evidence of continued initiatives undertaken to reduce greenhouse gas emissions.	Active In Compliance	Active In Compliance	In 2023, Baffinland installed Radio Frequency Identification tags on equipment that use fuel to monitor and manage their fuel consumption. 2023 was considered a high fuel usage year for power generation likely due to extreme weather; however, Baffinland remains committed to building upon its fuel reduction initiatives.
4. Engage Inuit in climate change related research and studies.	Active In Compliance	Active In Compliance	In the 2023 annual report, Baffinland noted it has developed roadmaps under the newly revised Climate Change Strategy and updates regarding the status of these activities will be provided in future relevant updates in the Annual Report to the NIRB.
5. Implement reasonable measures to ensure that Project-site weather related information is publicly available.	Active In Compliance	Active In Compliance	Baffinland makes the weather for the Mary River Project locations (Mine Site and Milne Port) publicly available on their website at www.baffinland.com and through the Weather Network.
6. Provide results of emissions to determine levels of sulphur dioxide (SO ₂) and nitrogen oxide (NO ₂) emissions, and greenhouse gases (GHG) generated by fuel consumption or other relevant criteria.	Active In Compliance	Active In Compliance	Baffinland provided a table summarizing their 2023 annual emissions noting that total gaseous emissions have decreased slight from 183,949 tonnes in 2022 to 172,603 tonnes in 2023.
7. Update Air Quality and Noise Abatement Plan to include continuous SO ₂ and NO ₂ monitoring at both <i>Port</i> sites to capture	<i>Milne Inlet</i> : Active In Compliance	<i>Milne Inlet</i> : Active In Compliance	Baffinland continues monitoring of SO ₂ and NO ₂ at Mine Site Complex and Port and the values remain within the air quality objectives. Consistent with historical trends, the 2023 measured

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
construction and operations phase ship-generated emissions.			concentrations of NO ₂ and SO ₂ at Mine Site Complex and Port Site Complex were highest in the winter and lowest in the summer. ⇒ <i>DRAFT Air Quality and Noise Abatement Management Plan (2023)</i> .
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	Monitoring to commence once Steensby facilities are developed.
8. Demonstrate air quality monitoring of SO ₂ and NO ₂ emissions at the mine site and both <i>Port</i> sites emissions remain within predicted levels. Provide rationale and mitigation measures for exceedances.	<i>Milne Inlet:</i> Active In Compliance	<i>Milne Inlet:</i> Active In Compliance	In 2023, the measured concentrations of SO ₂ and NO ₂ levels across all sites were below the Nunavut Air Quality Standards. ⇒ <i>DRAFT Air Quality and Noise Abatement Management Plan (2023)</i> .
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	Monitoring to commence once Steensby facilities are developed.
9. Provide calculations of GHG emissions at both <i>Port</i> sites and other Project sources including Project associated aircraft.	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	Total calculated GHG emissions in 2023 were 168,888 t-CO ₂ eq (total carbon dioxide equivalent).
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	Monitoring to commence once Steensby facilities are developed.
10. Update the Dust Management Plan to include specific items and report all monitoring data and take all adaptive management measures as described within the updated Plan.	Active In Compliance	Active In Compliance	In 2023, dust suppression activities along the Tote Road from late June through early September. Baffinland conducted a detailed evaluation of the efficacy of calcium chloride and DUST/BLOKR® and it was determined that DUST/BLOKR® is not suitable for use on the Tote Road. See 2023 Terrestrial Environmental Annual Monitoring Report. Baffinland also integrated dust mitigation equipment maintenance into the planning process which has improved the availability of the equipment and decreasing ambient dust. Baffinland is also committed to resourcing a third party dust audit and will be sharing the results no later than January 31 st of each year.
11. Develop and Implement Incineration Management Plan.	Active In Compliance	Active In Compliance	Baffinland adheres to the six-step process for batch waste incineration as outlined by Environment and Climate Change Canada (ECCC) including conducting waste audits at both the Milne Port and Mary River Facilities. ⇒ <i>Waste Management Plan (2024)</i> .
12. Conduct at least one stack test immediately following commissioning of new incinerators.	Active In Compliance	Active In Compliance	Baffinland conducts annual stack testing for all of its incinerators in operation and results were below the Canadian Council of Ministers of the Environment Canada-wide Standards for dioxins and furans; however, the Milne Port incineration unit exceeded the emission concentrations for dioxins and furans for the second and third tests. These two (2) tests were likely affected by the addition of substantial oily rags to the waste load. Additional testing will continue to be conducted annually as required to demonstrate ongoing compliance with applicable emissions standards. Both incineration units showed consistently low mercury emissions concentrations. ⇒ <i>Waste Management Plan (2024)</i>

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
13. Work with Fisheries and Oceans Canada (DFO) to select overpressure threshold applied to explosives for the protection of fish and aquatic life.	Active In Compliance	Active In Compliance	No blasting occurred in 2023 within setback distances detailed by the DFO guidance document. Blasting is conducted in accordance with Baffinland's <i>Quarry Blasting Management Plan and Environmental Protection Plan</i> (2021). ⇒ <i>Surface Water and Aquatic Ecosystem Management Plan</i> (2021) ⇒ <i>Environmental Protection Plan</i> (2021)
14. Conduct noise and vibration monitoring at Project accommodations in summer and winter during all phases of the Project.	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	Monitoring for noise and vibration at the Mine site and Milne Port accommodations is conducted annually in the summer and winter seasons. The 2023 noise levels were below the 75 dBA exposure level for both areas; however, it was noted that average noise levels have experienced an increase over average recorded noise levels in years prior to 2018 for the Mine Site. This may be the result of additional construction activities that have occurred since 2017.
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	Monitoring to commence once Steensby facilities are developed.
14(a) Demonstrate appropriate adaptive management practices for construction activities at Milne Inlet that have the potential to disrupt marine mammals.	Active In Compliance	Active In Compliance	Baffinland replaced existing fenders on the ore dock with new ones and no construction activities occurred in Milne Port in 2023. Before any construction, Baffinland will work with DFO to ensure the relevant permits are obtained and appropriate adaptive measures are in place.
14(b) Demonstrate appropriate adaptive management for project activities during operations with the potential to disrupt terrestrial wildlife and other users of project areas.	Active In Compliance	Active In Compliance	The 2022 follow-up investigations indicate that average noise sound levels were within the modelled FEIS predictions and meets relevant noise guidelines 1.5 kilometres from the Project. ⇒ <i>DRAFT Air Quality and Noise Abatement Management Plan</i> (2023).
15. Collaborate with the Qikiqtani Inuit Association (QIA) and local Hamlets when undertaking consultation with affected communities regarding railway, Tote Road, and marine shipping operations. Use of visuals during the presentations are recommended to enhance public's understanding and safety considerations for the public who may travel through the area.	Active In Compliance	Active In Compliance	Baffinland continues to work with local communities and the QIA regarding safety considerations for those interacting with the Project. Baffinland also created full-time Community Liaison Officers in five (5) of the North Baffin communities. Baffinland continues to inform its shipping activities through Facebook and the local radio. The Visitor Communication Centers along the Tote Road remained available for hunters and visitors. Baffinland also hosted workshops to provide updates on the Steensby Component.
16. Ensure that water related infrastructure and facilities are consistent with those proposed in the FEIS and FEIS addendum in terms of type, location and scope.	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	Baffinland ensures that the water related infrastructure and facilities constructed on site are consistent with those proposed in the FEIS and related addendums. In 2023, Baffinland completed the following work: <ul style="list-style-type: none"> • Maintenance of surface water drainage infrastructure • Continued management of ore crusher pad and ore stockpile pad regrading strategy; • Upgrades to fish bearing crossings; • Erosion and sediment control measures along several culverts on the Tote Road;

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			<ul style="list-style-type: none"> Implementation of corrective measures along the Tote Road; Continued remedial works of the MS-11 Surface Water Management Pond; Geotechnical drilling program to develop a remediation plan at KM 105 Pond. <p>In January 2024, DFO issued a Letter of Advice to Baffinland to implement a permanent crossing solution for ten (10) crossings along the Tote Road.</p>
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby railway has not been developed yet.
17. Develop and implement measures to ensure that all effluent satisfies discharge criteria established by relevant regulatory authorities.	Active In Compliance	Active In Compliance	<p>Related to Terms and Conditions 24 and 46.</p> <p>In 2023, a total of four (4) effluent discharges did not comply with the applicable discharge criteria: Milne Port Bulk Fuel Storage Facility (MP-03); Contaminated Snow Containment Berm (MP-04A); and at the Mine Site at the Waste Rock Facility Surface Water Management Pond (MS-08), and the KM 105 Surface Water Management Pond (MS-11). A full discussion of the results were provided in the NWB Annual Report. Baffinland continues to conduct robust incident investigations to identify root causes of water quality discharge incidents so that effective long-term corrective actions can be developed and implemented.</p> <p>⇒ <i>Fresh Water Supply, Sewage and Wastewater Management Plan</i> (2024).</p>
18. Carry out continued analyses to confirm and update, as needed, the approximate fill time of the mine lake pit identified in the FEIS.	Active In Compliance	Active In Compliance	Current mining activities have not created a pit yet at Deposit No. 1. Baffinland to update the estimated min pit lake fill time in the <i>Interim Closure Reclamation Plan</i> (2018) as additional information becomes available.
19. Develop and implement adequate water infrastructure monitoring to ensure that natural water flow is not significantly hindered. Monitor and report water withdrawal rates and water use for domestic and industrial purposes.	Active Deficient – In Progress	Active Deficient – In Progress	<p>For 2023, Baffinland continued to monitor Project water crossing and conduct routine preventative maintenance such as snow clearance prior to freshet. For source water withdrawal limits, there were only two (2) exceedances in 2023, a significant improvement from thirty (3) exceedances in 2022. Baffinland is taking corrective actions to prevent similar water withdrawal exceedance from occurring in the future, including training staff in 2024.</p> <p>⇒ <i>Environmental Protection Plan</i> (2021)</p> <p>⇒ <i>Roads Management Plan</i> (2020)</p> <p>⇒ <i>Surface Water and Aquatic Ecosystem Management Plan</i> (2021)</p>
20. Monitor the effects of explosive residue and by-products from Project related blasting. Implement measures to ensure explosives do not negatively affect the surrounding area.	Active Deficient – In Progress	Active Deficient – In Progress	During 2023, all samples collected were below the Canadian Water Quality Guidelines. Evidence of Project-related change was observed in Camp Lake and Sheardown Lake systems. A special investigation will be conducted in 2024 including implementation of an expanded spatial water quality program to identify the source(s) of ammonia.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			nitrate, and total Kjeldahl nitrogen. No adverse effects have been monitored for phytoplankton, benthic invertebrates or Arctic char in Camp Lake and Sheardown Lake. ⇒ <i>Aquatic Effects Monitoring Plan (2024)</i>
21. Ensure that the scope of the Aquatic Effects Monitoring Program (AEMP) is consistent with the requirements in the condition to mitigate potential impacts to surface and ground waters.	Active In Compliance	Active In Compliance	Key component studies of the AEMP conducted in 2023 included the Core Receiving Environment Monitoring Program (CREMP), Lake Sedimentation Monitoring Program, and Dustfall Monitoring Program. ⇒ <i>Aquatic Effects Monitoring Plan (2024)</i>
22. Develop a Sediment and Erosion Management Plan.	Active In Compliance	Active In Compliance	A <i>Sediment and Erosion Management Plan</i> is incorporated into Baffinland's <i>Surface Water and Aquatic Ecosystem Management Plan (2021)</i> .
23. Develop and implement Groundwater Monitoring and Management Plan.	Active In Compliance	Active In Compliance	During 2023, groundwater was sampled from groundwater wells downstream of various Project Infrastructure and installation of several new groundwater monitoring locations at the Landfill Facility and the Mine Site Hazardous Waste Berm Facility. In addition, the desktop risk assessment conducted in 2022 was expanded in 2023 to include Milne Port Sites. Despite these operational challenges, Baffinland is committed to continuing to advance the groundwater monitoring program in 2024 to gain a better understanding of natural groundwater chemistry at the Project site. ⇒ <i>2023 Groundwater Monitoring Report</i> (Knight Piesold, 2024) ⇒ <i>Surface Water and Aquatic Ecosystem Management Plan (2021)</i>
24. Monitor as required to ensure that effluent discharge conditions are met all times	Active Deficient – In Progress	Active Deficient – In Progress	See Term and Condition 17 for discussion on this topic.
25. Undertake investigations to identify sensitive landforms and develop and implement measures to minimize Project impacts on identified landforms.	Active In Compliance	Active In Compliance	Two (2) geotechnical inspections were conducted by an outside consultant of the Project facilities and infrastructure. Results from the inspections indicated that most infrastructure are in good condition. Minor repairs and actions were recommended such as repairs to pond liners, removal of debris around lined areas, and discharging stormwater retained in hazardous waste berms. Geotechnical investigations continue to be conducted at Project sites to support engineering studies for future Project infrastructure. ⇒ <i>2023 Annual Geotechnical Inspection Reports (WSP, 2023)</i> .
26. Develop and implement a comprehensive Erosion Management Plan.	Active In Compliance	Active In Compliance	An erosion management plan is included in the <i>Surface Water and Aquatic Ecosystem Management Plan (2021)</i> , with sediment and erosion control discussed within the <i>Environmental Protection Plan (2021)</i> .
27. Include information on the sentiments heard by communities on impacts to the aesthetic value of the Project area.	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	Baffinland public consultation and community feedback did not reveal any significant concerns about specific impacts that changes to the topography and landscape have had on the aesthetic value of the Project area. Aesthetic concerns related to the use of dust-laden snow to make tea by land users traveling near Project Sites were heard.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby railway and facilities have not been developed yet.
28. <i>Modified for SOP:</i> Monitor Project effects on permafrost along the railway, the Tote Road and all other Project affected areas and implement effective preventive measures to ensure its integrity.	<i>Milne Inlet and Mary River Site</i> Active Deficient – In Progress	<i>Milne Inlet and Mary River Site</i> Active In Compliance	Bi-annual inspections were completed by a consultant in June and September of 2023. Baffinland continues to have permafrost degradation along the Tote Road and Mine Haul Road. Baffinland continues to implement recommendations from the consultants. ⇒ <i>2023 Annual Geotechnical Inspections</i> (WSP, 2023)
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby railway and facilities have not been developed yet.
29. Provide construction design and drawings for review and acceptance by relevant authorities. Provide as-built drawings to authorities following construction.	Active In Compliance	Active In Compliance	Two (2) engineering submission was provided to regulatory agencies in 2023.
30. Develop site-specific quarry operation and management plans before the development of any potential quarry site or borrow pit.	Active In Compliance	Active In Compliance	No new quarry sites or borrow pits were developed in 2023. Current plans were in place and followed for operation of existing quarries.
31. Ensure that Project activities are planned and conducted to minimize the Project footprint.	Active In Compliance	Active In Compliance	By the end of 2023, the total Project footprint was 613 hectares (ha) which is less than the 7,618-ha assessed in the FEIS. During 2023, no unauthorized land disturbance occurred and all disturbed land is reported in the <i>2023 Terrestrial Environment Annual Monitoring Report</i> (2024). ⇒ <i>Environmental Protection Plan</i> (Baffinland, 2021)
32. Ensure that all supplies brought to site are clean of soil that could contain plant seeds not naturally occurring in the area. Inspect vehicle tires prior to initial use in Project area.	Active In Compliance	Active In Compliance	No exotic invasive plants were identified in 2023 during incidental monitoring. Baffinland has since 2018 service agreements and contracts that stipulate that “All equipment delivered to site must be free and clear of soils that may contain seeds of invasive species”. Visual inspections are conducted to ensure compliance. ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2024)
33. Include relevant monitoring and management plans within the Terrestrial Environment Mitigation Monitoring Plan (TEMMP).	Active In Compliance	Active In Compliance	The TEMMP was updated in May 2023 with a draft circulated to the Terrestrial Environment Working Group (TEWG) for review. The draft TEMMP will be finalized in 2024. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan</i> (2023)
34. Prior to commencing operations, conduct soil sampling to determine levels of metals in soils where berry producing plants are.	Active In Compliance	Active In Compliance	No soil and lichen sampling occurred in 2023 as the Project met its assessment frequency. The next proposed sampling is to occur between 2025-2027. Previous sampling indicated no net change from baseline values and values are below or within an acceptable range for soil-metal concentrations. ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2023)
35. <i>Modified for SOP:</i> Monitor baseline metal levels in organ tissue of caribou harvested	Active Deficient – In Progress	Active Deficient – In Progress	Baffinland is a collaborator through the Northern Contaminants Program. Tissue samples harvested by hunters will be analyzed for

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
with an updated monitoring plan implemented to identify metal levels in caribou and other terrestrial wildlife species.			metals and other potential contaminants. Due to potential conflicts of running separate/parallel programs in conjunction with the GN, Baffinland resolved that the best approach was to defer to data made publicly available to meet its requirements of this term and condition. The GN provided an update on the health monitoring program for caribou on Baffin Island at the December 2023 TEWG meeting noting that preliminary results for samples collected in 2022 were consistent with the Qamanirjuaq herd which has been monitored since 1999.
36. Establish an on-going monitoring program of vegetation used as caribou forage near Project development areas, prior to commencing operations.	Active In Compliance	Active In Compliance	Annual vegetation surveys were conducted between 2014-2019 and in 2023. Next scheduled assessment is 2026. To date, no evidence of change in vegetation abundance due to Project effects were determined. ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2024).
37. Incorporate protocols to monitor the potential introduction of invasive plant species into the Terrestrial Environment and Monitoring Plan. Report non-indigenous plant species to the Government of Nunavut (GN).	Active In Compliance	Active In Compliance	Exotic invasive monitoring is scheduled every three (3) to five (5) years or triggered by observations. Monitoring occurred in 2014 and 2019 with a follow-up in 2020 as one (1) exotic invasive species was found in 2019, associated with sewage infrastructure. Next scheduled monitoring to occur in 2024. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan</i> (2023).
38. Review and adjust all monitoring information and management plans annually and adjust as needed to prevent/reduce adverse project effects on vegetation.	Active In Compliance	Active In Compliance	The TEMMP was updated in May 2023 with a draft circulated to the TEWG for review. The draft TEMMP will be finalized in 2024. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan</i> (2023)
39. Develop a progressive revegetation program for disturbed areas no longer in use.	Active In Compliance	Active In Compliance	Reclamation earthworks were completed in 2019 at KM 16 and KM52; and in 2021 at KM 18. Follow-up monitoring in 2022 noted that all sites were stable and deemed low erosion potential; however wind-swept surface soil erosion was apparent. Some revegetation was observed at all sites. ⇒ <i>Interim Closure and Reclamation Plan</i> (2018)
40. Include revegetation plans in the Site Reclamation Plan that promotes progressive reclamation compatible with the surrounding environment.	Active In Compliance	Active In Compliance	Provided in the <i>Interim Closure and Reclamation Plan</i> (2018). Test plot sites were re-evaluated in 2023 and it was noted that surface preparations had been “washed out” due to weather and were no longer apparent at the sites. Baffinland continues to review locations for new test sites. ⇒ <i>Revegetation Survey and Preliminary Reclamation Trial – 2023</i> (2024)
41. Maintain a 100-metre naturally vegetated buffer between the high-water mark of any fish-bearing water bodies and permanent	Active In Compliance	Active In Compliance	No new quarries were developed in 2023 and existing quarries maintained a 100-metre buffer from the high-water mark to any fish bearing bodies.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
quarries with the potential for acid rock drainage, unless otherwise approved.			⇒ <i>Borrow Pit and Quarry Management Plan</i> (2014) ⇒ <i>Q1 Quarry Management Plan</i> (2020) ⇒ <i>QMR2 Quarry Management Plan</i> (2021)
42. Maintain a 30-metre naturally vegetated buffer between the mining operation and adjacent water bodies.	Active In Compliance	Active In Compliance	Project activities maintained a 31-metre buffer from any waterbody, except where authorized under the Type 'A' Water License and DFO Letters of Advice. ⇒ <i>Surface Water and Aquatic Ecosystems Management Plan</i> (2021) ⇒ <i>Environmental Protection Plan</i> (2021)
43. Submission of a Site Drainage and Silt Control Plan to the relevant authorities prior to the start of construction.	Active In Compliance	Active In Compliance	Drainage plans for Project sites and silt/sediment control measures used at the Project are outlined in the Project's <i>Surface Water and Aquatic Ecosystem Management Plan</i> (2021) and Baffinland will continue to implement the approved <i>Long Term Water Management Plan</i> (2021).
44. Meet or exceed guidelines for blasting thresholds set by DFO for the protection of fish and fish habitat.	Active In Compliance	Active In Compliance	No blasting occurred in 2023 within the required setback distances established by the DFO. ⇒ <i>Environmental Protection Plan</i> (2021)
45. Adhere to the No-Net-Loss principle at all phases of the Project to prevent fish and fish habitat losses.	Active In Compliance	Active In Compliance	In 2023, no in-water construction works requiring a <i>Fisheries Act</i> Authorization (FAA) were completed that required adherence to the No-Net-Loss principle. Baffinland continues to routinely inspect fish bearing water crossings and address identified concerns with an assessment completed in 2023 of the Project's fish bearing water crossings by a third-party biologist with the assessment of the water crossing to continue in 2024. ⇒ <i>Fish Habitat No Net Loss and Monitoring Plan</i> (Knight Piesold, 2007)
46. Ensure runoff from fuel storage and maintenance facility areas, sewage and wastewater other facilities generating liquid effluent and runoff meet discharge requirements.	Active Deficient – In Progress	Active Deficient – In Progress	See Term and Condition 17 for discussion on this topic. Overall, the frequency of incidents involving the discharge of effluents to the receiving environment that exceed the applicable discharge criteria remained low in 2023, which has been consistent since the start of operations 2014
47. Design and construct all Project infrastructure so as they do not prevent or limit the movement of water in fish bearing streams.	Active In Compliance	Active In Compliance	In 2023, no in-water construction works requiring a FAA were completed. In 2023, fish bearing water crossings were assessed by a third-party biologist with the assessment of the water crossing to continue in 2024. ⇒ <i>Fish Habitat No Net Loss and Monitoring Plan</i> (Knight Piesold, 2007)
48. Engage with DFO and the QIA to explore Project specific thresholds for blasting that would exceed guidelines.	Active In Compliance	Active In Compliance	To date, there has been no need to undertake blasting in or near water. Should this become necessary, Baffinland committed to engage the appropriate parties if required.
48(a) Conduct additional surveys for the presence of Arctic char in freshwater bodies and ongoing monitoring of Arctic char health	Active Deficient – In Progress	Active Deficient – In Progress	Baffinland conducted annual fish population assessments for Arctic char in Camp Lake, Sheardown Lake, Mary Lake and Reference Lake

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
where applicable, within watersheds proximal to the mine, Tote Road, and Milne Inlet Port project development areas, including but not limited to, Phillips Creek, Tugaat and Qurluktuk lakes. Consult with Mittimatalik Hunters and Trappers Organization (MHTO) re: the design, timing, and location of proposed surveys and ongoing monitoring.			3 near the Mine site as part of the CREMP in addition to fish use assessments as part of Terms and Conditions 45 and 47. The Milne Inlet Freshwater Fish Health Assessment program was implemented in 2021 with sampling occurring at sites following discussions with the MHTO. A second year of monitoring was completed for this program in 2022. Baffinland met with the MHTO in 2023 to discuss the sampling program but due to time constraints, no sampling occurred in 2023. ⇒ 2022 Milne Inlet Freshwater Fish Health Assessment Preliminary Results (Minnow, 2023) ⇒ 2023 CREMP Report (Minnow, 2024)
49. <i>Modified for PIP:</i> Establish a TEWG along with the QIA, GN, Government of Canada and HTO to serve as an advisory body.	Active In Compliance	Active In Compliance	The TEWG was established in 2013. Baffinland's 2023 Annual Report documents all TEWG meetings and meeting minutes. Baffinland has been working the TEWG to draft an update to the terms of reference to meet the term and condition. Most recent draft was revised in April 2024.
50. Continue to develop and implement a Project specific terrestrial monitoring plan with clear thresholds to allow for assessment of long-term trends and cumulative effects. Coordination and cooperation will be required with other parties.	Active In Compliance	Active In Compliance	The terrestrial environment monitoring programs are reviewed regularly with the TEWG to improve methodologies and long-term assessments. ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023) ⇒ 2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)
51. Where appropriate, consider cooperating with relevant regional and/or community-based monitoring initiatives that raise issues or produce information pertinent to mitigating project-induced impacts. Give special consideration for supporting regional studies of population health and harvest programs for North Baffin caribou.	Active In Compliance	Active In Compliance	Baffinland has provided financial and logistical support for the GN's North Baffin Island caribou survey since 2009. Baffinland also participates as a member of the TEWG. ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023) ⇒ 2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024) ⇒ Caribou Monitoring – Triggers and Recommendations (EDI, 2022)
52. Initiate and develop a timeline to test and implement deterrence mechanisms for caribou near hazardous areas, within 3 months of issuances of the Project Certificate. Report information back to the TEWG.	Active Deficient – In Progress	Active Deficient – In Progress	Caribou abundance is relatively low on Baffin Island; however, Baffinland committed to continue to monitor caribou within the Project sites and RSA, support regional caribou monitoring conducted by the GN, and identify appropriate caribou deterrents from Deposit No. 1 and hazardous areas in conjunction with the TEWG as necessary. ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)
53. Proponent shall demonstrate all measures to mitigate impacts to caribou.	Milne Inlet and Mary River Site Active	Milne Inlet and Mary River Site Active	Baffinland has created the Caribou Decision Tree as presented in the TEMMP to detail actions to take if, and when caribou are observed on site. Detailed methods are also included in the 2023 Terrestrial

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
a) Steps taken to prevent caribou mortality and injury due to train and vehicular traffic. b) Monitoring and mitigation measures at points where transportation routes pass through calving areas. c) Evaluation of effectiveness of proposed caribou crossings. d) Surveillance system along the railway corridor to identify the presence of caribou. e) Protocols for documentation and reporting of caribou collisions and mortality.	In Compliance for a, b, c, and e	In Compliance for a, b, c, and e	Environment Annual Monitoring Report which is reviewed by the TEWG. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>
	<i>Steensby Inlet:</i> Not Yet Active for all items	<i>Steensby Inlet:</i> Not Yet Active for all items	The Steensby railway and facilities have not been developed yet.
54. Provide an updated TEMMP which includes all aspects included in the condition.	Active In Compliance	Active In Compliance	The TEMMP was updated in May 2023 with a draft circulated to the TEWG for review. The draft TEMMP will be finalized in 2024. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i>
55. Develop an adaptive management plan applicable to wolves and wolf habitats in collaboration with the GN.	Active In Compliance	Active In Compliance	No significant wolf population has been identified in the Project area; thus, work is on hold for now. Protocols exist and are ready to be implemented should they be required, including carnivore den monitoring. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>
56. Develop a progressive strategy for the recovery of terrestrial wildlife habitat that is consistent with the <i>Nunavut Wildlife Act</i> .	Active In Compliance	Active In Compliance	Baffinland noted that an <i>Interim Mine Closure and Reclamation Plan (2018)</i> was in place to identify best practices for promoting natural revegetation and support the rehabilitation of affected areas. ⇒ <i>Revegetation Survey and Preliminary Reclamation Trial (2022)</i>
57. Report on terrestrial environment monitoring efforts including information included in the condition to mitigate and monitor impacts to wildlife.	Active In Compliance	Active In Compliance	Baffinland provided a summary of the terrestrial monitoring efforts within the <i>2023 Annual Report</i> noting that the TEWG is engaged regularly to discuss annual monitoring programs for the terrestrial environment. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
58. Incorporate a review section in the report to the NIRB that includes information how impacts to wildlife are mitigated and monitored as described in the condition.	Active In Compliance	Active In Compliance	Baffinland provided a summary of the terrestrial monitoring efforts within the <i>2023 Annual Report</i> . ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan</i> (2023) ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2024)
59. Ensure that aircraft maintain, whenever possible altitudes outlined in the condition to mitigate disturbance to wildlife and Inuit harvesting. Develop measures with the TEWG to ensure all employees and subcontractors providing aircraft services are respectful of wildlife and Inuit harvesting that may occur in the Project development area.	Active Deficient – In Progress	Active Deficient – In Progress	A discrepancy has been noted between Terms and Conditions 59 and 71 in which a minimum flight altitude of 610 meters above ground level (magl) and 650 magl has been discussed. Since nearly all flight areas contain migratory birds, the default minimum altitude for helicopter flights was 650 magl. Through consultation with the TEWG, pilots were required to fill out daily time sheets to note reason for flight height deviations. <i>NOTE: NIRB condition comment states “Unless the TEWG provided additional direction, the minimum flight altitude set out in this T&C will govern with respect to migratory birds specifically.”</i> Baffinland provided several rationales that pilots noted for these deviations including but not limited to survey methods requiring low flights, short distance flights that don’t allow for 650 magl to be achieved and slinging. Baffinland reported 68% conformity with flight heights in snow goose areas during the moulting season (July-August). ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan</i> (2023) ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2024)
60. Develop a blasting program to minimize the effects of blasting on terrestrial wildlife (caribou, sensitive local carnivores or birds), prior to construction.	Active In Compliance	Active In Compliance	According to Baffinland, no known harm or disturbance has occurred to wildlife by blasting during the construction. ⇒ <i>Borrow Pit and Quarry Management Plan</i> (2014) ⇒ <i>Environmental Protection Plan</i> (2021)
61. Implement a stop work policy when wildlife in the area may be endangered by Project work, whenever practical and not causing human safety concerns.	Active In Compliance	Active In Compliance	The Environment Protection Plan outlines the ‘stop work’ procedure and the TEWG provided an operational definition of ‘endangered’. ⇒ <i>Environmental Protection Plan</i> (2021)
62. Prohibit Project employees from transporting firearms to site and from operating firearms in the Project area for the purpose of wildlife harvest.	Active In Compliance	Active In Compliance	Baffinland policy prohibits employees from carrying firearms on site. In 2023, no incidences of Project personnel hunting or fishing within Baffinland’s Project Development Area. ⇒ <i>Weapons on Site Policy</i> (2015) ⇒ <i>Hunting and Fishing Policy</i> (2013)
63. Liaise with local HTOs in advance of carrying out terrestrial wildlife surveys.	Active In Compliance	Active In Compliance	Baffinland provided a list of engagements with all HTO’s, Inuit Organizations, and Hamlets in 2023 through both working group meetings and additional meetings.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
Meet with the organizations in person annually to discuss wildlife monitoring.			⇒ 2023 Engagement Records ⇒ 2023 TEWG Meeting Minutes ⇒ 2023 Shipping Season Meeting Records
64. Ensure the environment protection plan incorporates waste management provisions to ensure carnivores are not attracted to Project site(s).	Part A and B Active In Compliance	Active In Compliance	Baffinland continues to mitigate wildlife interactions at the Project area by training, enforcing and monitoring waste management practices and guidelines. All employees on-site must pass training on the environmental protection. ⇒ Environmental Protection Plan (2021) ⇒ Waste Management Plan (2024) ⇒ 2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)
65. Ensure all employees at site receive bird awareness training (avoidance of nests and large concentrations of foraging and moulting birds).	Active In Compliance	Active In Compliance	Baffinland continued to monitor grounds of new construction activities. Department employees continued to receive annually bird survey training. ⇒ Environmental Protection Plan (2021) ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)
66. Avoid bird Species at Risk and their nests; establish avoidance zones as per TEMMP.	Active In Compliance	Active In Compliance	No Species at Risk nests or eggs have been encountered during Project activities. Baffinland will continue to avoid nests and eggs when encountered. ⇒ 2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024) ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)
67. Ensure mitigation and monitoring strategies for bird Species at Risk are updated for consistency with applicable status reports, recovery strategies, action plans and management plans.	Active In Compliance	Active In Compliance	Baffinland coordinates with ECCC to develop mitigation and monitoring strategies for Species at Risk through the TEWG meetings. ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023) ⇒ 2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)
68. Establish flashing red, red strobe or white strobe lights and guy-wire deterrents on communications towers. Consider reducing lighting when possible in areas where it may serve as an attractant to birds or other wildlife.	Active In Compliance	Active In Compliance	In 2013, reflectors were installed on guy wires of communications towers and will be installed on new infrastructure. Strobe lights were found to not be relevant mitigation measures since birds are mostly present during the period of 24-hour sunlight. ⇒ DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)
69. Prior to bird migrations and nesting, identify and install nesting deterrents (e.g., flagging) to discourage birds from nesting that will be disturbed by construction/clearing activities.	Active In Compliance	Active In Compliance	In 2023, there were no attempted nesting attempts in previously cleared area and no nest were found in a previously undisturbed area. No deterrents were used during land disturbance activities.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>
70. Protect any nests found (or indicated nests) with a buffer zone as per setback distances outlined in the TEMMP.	Active In Compliance	Active In Compliance	In 2023, no nests were discovered during surveys. Any new land disturbed for Project infrastructure occurred outside the breeding bird window. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>
71. Subject to safety requirements, Proponent to ensure all project related aircraft maintain a cruising altitude of at least a) 650 m during point to point travel; b) 1100 m vertical and 1500 m horizontal distance from observed concentrations of migratory birds; and c) 1100 m over the area identified as key sites for moulting snow geese.	Active Deficient – In Progress	Active Deficient – In Progress	See Term and Condition 59 for discussion on this topic.
72. Ensure that pilots are informed of minimum cruising altitude guidelines and that a daily log or record of flight paths is maintained and available for regulatory authorities.	Active Deficient – In Progress	Active In Compliance	Related to Terms and Conditions 59 and 71. Pilots are contracted to follow flight altitude regulations set in place by Baffinland through the Project Certificate. However, non-compliances are due to flight requirements such as weather, movement of personnel and equipment, pilot safety or short flight distances. After considering pilot rational, Baffinland reported 68% conformity with flight heights in snow goose areas during the moulting season (July-August). Pilots are made aware of flight height requirements in ‘toolbox’ talks given at the beginning of each season and daily toolbox talks are held within each department. In addition, flight height compliance is incorporated into the helicopter contract Baffinland holds with Canadian Helicopters. Random audits of flight logs are also completed throughout the season to help ensure compliance with requirements. ⇒ <i>Environmental Protection Plan (2021)</i> ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>
73. Develop detailed and robust mitigation and monitoring plans for migratory birds taking into consideration input from relevant organizations.	Active In Compliance	Active In Compliance	Baffinland continued to obtain ECCC’s expertise via the TEWG and MEWG to adapt and develop mitigation and monitoring plans for birds. Related to Terms and Conditions 68, 69 and 74.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i> ⇒ <i>2023 TEWG Meeting Minutes</i>
74. Develop and update relevant monitoring plans for migratory birds prior to construction including the key indicators included in the condition to mitigate and monitor impacts to birds.	Active In Compliance	Active In Compliance	Baffinland followed monitoring programs as describe within its TEMMP and collect opportunistic information when qualified biologists are on site. To date, the monitoring data of bird densities are insufficient to monitor Project effects. ⇒ <i>DRAFT Terrestrial Environment Mitigation and Monitoring Plan (2023)</i> ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i>
75. Report annually on terrestrial habitat loss due to the Project to verify impact predictions and updated estimates of project footprint.	Active In Compliance	Active In Compliance	At the end of 2023, the total Project footprint was 613 hectares which is less than what was assessed in the FEIS (7, 618 ha), and to date all Baffinland's activities have occurred within the PDA. Baffinland committed to continue to monitor terrestrial habitat loss due to disturbance and maintain the limits within the PDA. ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)</i> ⇒ <i>Environmental Protection Plan (2021)</i>
76. <i>Modified for SOP:</i> Develop a comprehensive marine environmental effects monitoring program to address concerns and identify potential impacts on the marine environment.	Active In Compliance	Active In Compliance	Overall, the Marine Environmental Effects Monitoring Plan (MEEMP) sampling results from 2023 do not suggest degradation of the marine physical or biological environment. ⇒ <i>2023 MEEMP and NIS/AIS Monitoring Report (WSP, 2024)</i>
77. <i>Modified for PIP:</i> Establish a MEWG as an advisory oversight body providing advice, guidance and enforceable recommendations to fulfill the intended objectives. A Terms of Reference shall be established to guide the participation of observers.	Active In Compliance	Active In Compliance	The MEWG was established in 2013 and met several times in 2023 to guide and review the development of marine monitoring efforts. Like the TEWG, although established, the Terms of Reference have yet to be finalized. Baffinland continues to work on a revised Terms of Reference throughout 2024. ⇒ <i>2023 MEWG Meeting Records</i>
78. Update baseline information for landfast ice using a long-term dataset and with inter-annual variation. Update analysis for pack and landfast ice annually.	<i>Milne Inlet and Mary River Site</i> Active Deficient – In progress	<i>Milne Inlet and Mary River Site</i> Active In Compliance	Ice condition studies were commissioned by Baffinland in 2011, 2015, 2016, and 2021 for the Northern shipping route. Baffinland also uses the Canadian Ice Service and satellite imagery by Fednav. Ice conditions are also available in real-time from the icebreaker if utilized to escort vessels. This makes it difficult to integrate into a management plan in advance of the season. Baffinland indicated that this study will continue to be updated as new data becomes availability. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan (2023)</i>

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	Baffinland conducted an extended ice study in 2024 for the Steensby Shipping Route noting that ice conditions have been variable from year to year, with no obvious trends apparent. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan (2023)</i>
79. Provide the Canadian Hydrographic Services with bathymetric data and other information in support of Project shipping where possible.	<i>Milne Inlet and Mary River Site</i> Active In Compliance	<i>Milne Inlet and Mary River Site</i> Active In Compliance	Baffinland conducted a bathymetric survey at the Milne Inlet ore dock to determine subsea elevations and bottom type conditions in 2023.
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	Baffinland consulted with Canadian Hydrographic Survey (CHS) for their technical guidance on the methodology of bathymetric surveys for Steensby Inlet. CHS also undertook a gap analysis of existing data for Foxe Basin and Hudson Strait to identify gaps in data.
80. Prior to commercial shipping of iron ore, a detailed risk assessment is to be conducted for Project related shipping accidents.	Active In Compliance	Active In Compliance	Baffinland has developed and maintains contingency plans to respond to spills and conducts annual spill response exercises. See also terms and conditions 78 and 92. ⇒ <i>Emergency Response Plan (2020)</i> ⇒ <i>Oil Pollution Emergency Plan–Milne Inlet (2022)</i> ⇒ <i>Oil Pollution Prevention Plan–Milne Inlet (2022)</i> ⇒ <i>Spill Contingency Plan (2021)</i> ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan (2023)</i> ⇒ <i>Spill at Sea Response Plan (2023)</i> ⇒ <i>Diesel Environmental Emergency (E2) Plan (2020)</i>
81. Reassess the potential for ship wake impacts to cause coastal change following changes to the proposed shipping route.	<i>Northern Route:</i> Active In Compliance	<i>Northern Route:</i> Active In Compliance	Baffinland indicated that ship wake effects were assessed for the Mary River Project in 2012 and 2018 with results indicating wind generated waves are likely to exceed ship waves. An updated ship wake assessment was prepared in 2023 to determine the potential effects of larger ore carriers for the SOP.
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed yet.
82. <i>Modified for SOP:</i> To mitigate potential shoreline effects from shipping, provide a summary of available information describing the wake characteristics at various vessel speeds and distances for all vessel types to be used to transport ore. If new vessel type to transport ore is to be used, the Proponent is required to update the summary information previously provided to the NIRB under this condition.	<i>Northern Route:</i> Active Not Yet Applicable	<i>Northern Route:</i> Active In Compliance	Baffinland generated a report to assess the Project effects on the marine physical environment related to shipping activities describing the wake characteristics at various vessel speeds and distances for all vessel types to be used to transport ore. Ship-generated waves (wake) are expected to be minimal along the Northern Shipping Route with maximum wave heights of 0.12 m near the sailing line and less than 0.05 m at distances greater than 1 Km from the sailing line. The wake height is primarily constrained by the vessel speed limit of 9 knots along the shipping route.
	<i>Southern Route</i> In Compliance	<i>Southern Route</i> In Compliance	Ship wake effects on shorelines along the southern route were assessed in the FEIS. Results for this route indicated that wave energy from

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			wind generated waves is estimated to exceed ship-generated wave energy and ship waves are unlikely to cause any measurable erosion or habitat alteration along the Southern Shipping Route.
83. Install tidal gauges at the Port Sites to monitor sea levels and storm surges.	<i>Milne Inlet:</i> Active In Compliance	<i>Milne Inlet:</i> Active Deficient – In Progress	See Term and Condition 1.
	<i>Steensby Inlet:</i> Deficient – In Progress	<i>Steensby Inlet:</i> Active Deficient – In Progress	See Term and Condition 1.
83 (a) <i>Modified for SOP:</i> conduct hydrodynamic modelling in the Milne Inlet Port area to determine potential impacts from disturbance to sediments. Modelling results shall be used to update marine water and sediment quality monitoring and mitigation program. Update the marine water and sediment quality monitoring and mitigation program as necessary to reflect the increased use of larger ore vessels at Milne Port. The monitoring program shall include an ongoing assessment of the potential introduction of metals that bio-accumulate in the marine food chain.	<i>Milne Inlet:</i> Active In Compliance	<i>Milne Inlet:</i> Active In Compliance	In 2018, Baffinland conducted hydrodynamic and sediment transport modelling near Milne Port. In 2019, a background review of hydrology and geomorphology in Philips Creek was conducted. The results of this study suggested that the measured 2014-2017 samples are within the range of natural variability. No further hydrodynamic modelling occurred in 2022. Hydrodynamic modelling was conducted in 2023 to support the SOP with an assessment of potential changes in currents, waves and sediment transport from the use of larger (Babycapex and Capesize) ore carriers. The results from the model indicated potential effects of larger ore carriers indicated ship-generated wave heights would be minimal and have negligible effects along the Northern Shipping Route.
84. Update the sediment redistribution modeling once ship design has been completed. Undertake sampling to validate the model and to inform sampling sites and the monitoring plan.	Active In Compliance	Active In Compliance	Refer to Terms and Conditions 81 and 83(a). In 2024, sampling for sediment quality and benthic infauna will be conducted on 8 stations that have been selected for Capesize effects monitoring. Additional stations will be sampled for benthic infauna for Non-Invasive Species (NIS)/Aquatic Invasive Species (AIS) monitoring (five (5) stations within Milne Port, potentially two (2) stations at Ragged Island if conditions permit).
85. <i>Modified for SOP:</i> Develop a monitoring plan to verify the impact predictions associated with sediment redistribution resulting from propeller wash in shallow water locations along the shipping route. Additional mitigation measures are required if monitoring detects negative impacts.	Not Yet Active Not Yet Applicable	Active In Compliance	Refer to Terms and Conditions 83(a) and 84. Updated plans were also received.
86. Prior to commercial shipping of iron ore, use more detailed bathymetry collected from Steensby and Milne Inlets (<i>Inlets</i>) to model anticipated ballast water discharges from ore carriers. This information should be used to update ballast water discharge impact predictions and sampling should be conducted to validate the model.	<i>Milne Inlet:</i> Active Deficient – In progress	<i>Milne Inlet:</i> Active In Compliance	Ballast water modelling was undertaken in 2023 to assess the potential impact of ballast water discharges associated with the use of larger ore carriers in the SOP on salinity and temperature levels in the marine environment. Results of all modelling indicated that ballast water discharged at Milne Port is unmeasurable beyond Ragged Island, and because of dilution is negligible within 5 Km of the discharge. Based on the results, Baffinland modified the NIS/AIS program to include some sampling at Ragged Island with the main focus at Milne Port.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			⇒ 2023 MEEMP and NIS/AIS Monitoring Report (WSP, 2024) ⇒ Ballast Water Dispersion Model
	Steensby Inlet: Not Yet Active	Steensby Inlet: Not Yet Active	The Steensby facilities have not been developed yet.
87. Develop a detailed monitoring program at several sites over long term to evaluate changes to marine habitat and organisms and to monitor for non-native introductions resulting from Project-related shipping. Initiate program several years prior to any ballast water discharge at Steensby or Milne Inlets.	Milne Inlet: Active In Compliance	Milne Inlet: Active In Compliance	The 2023 surveys resulted in 31 new additions to the taxonomic inventory for Milne Inlet that had not been observed in previous surveys but have records of occurrence in the Canadian Arctic. In addition, monitoring in 2023 collected five (5) taxa that had been placed on the Watch List in previous years due to uncertainties in their natural range. No trends signaling potential invasive behaviors were observed. Baffinland will continue to sample cross multiple trophic levels including expanding the zooplankton sampling program in 2024. ⇒ 2023 MEEMP and NIS/AIS Monitoring Report (WSP, 2024)
	Steensby Inlet: Not Yet Active	Steensby Inlet: Not Yet Active	The Steensby facilities have not been developed yet.
88. Prior to iron ore shipping, provide an updated ballast water discharge risk analysis to assess the adequacy of treatment and implications on the receiving environment.	Milne Inlet: Active In Compliance	Milne Inlet: Active In Compliance	Baffinland conducted an analysis in 2023 and determined that the overall risk (probability of introduction and magnitude of consequences) on a relative risk scale of lower-intermediate-higher was lower for ballast water-mediated introductions under the ERP and intermediate for the two (2) future scenarios under the SOP. Baffinland recommended that the NIS/AIS monitoring through the marine environmental effects monitoring program continue to be conducted on an annual basis. In addition, Baffinland noted that it is collaborating with DFO to develop a risk-based approach for biological ballast water sampling with a pilot program implemented in 2023 of incoming ore carriers at Milne Port. An updated risk assessment of ballast waters will be conducted following completion of the biological ballast water study. ⇒ Ballast Water Management Plan (2023) ⇒ 2023 MEEMP and NIS/AIS Monitoring Report (WSP, 2024)
	Steensby Inlet: Not Yet Active	Steensby Inlet: Not Yet Active	The Steensby facilities have not been developed yet.
89. To mitigate impacts to marine water quality resulting from ballast water exchange, develop and implement a ballast water management program that may include the treatment and monitoring of ballast water discharges in a manner consistent with or exceeds applicable regulations.	Milne Inlet: Active In Compliance	Milne Inlet: Active In Compliance	In 2023, 38 of the 39 ore carriers that serviced Milne Port had International Maritime Organization (IMO) approved D-2 ballast water treatment systems installed on board with many conducting repeat voyages resulting in 74 of the 75 ore carrier voyages completing both ballast water exchange and treatment methods prior to releasing ballast water in the RSA. Compliance monitoring data indicates that the current ballast water management measures, as outlined in Baffinland's Ballast Water Management Plan (2023), have been effective in protecting the marine environment from ballast-mediated introductions.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby facilities have not been developed yet.
90. Incorporate into the Project Shipping and Marine Mammals Management Plan provisions to achieve compliance with the requirements under international regulations for the management of ballast water or its replacement and as it may be amended.	<i>Milne Inlet:</i> Active In Compliance	<i>Milne Inlet:</i> Active In Compliance	Refer to Terms and Conditions 8 and 89. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan (2023)</i>
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby facilities have not been developed yet.
91. Develop a detailed monitoring plan for both <i>Inlets</i> for fouling that complies with all applicable regulatory requirements and guidelines issued by Transport Canada (TC); including sampling areas on ships where antifouling treatment is not applied.	<i>Milne Inlet:</i> Active In Compliance	<i>Milne Inlet:</i> Active In Compliance	Ship hull surveys have not been conducted since 2020 in the Milne Port. Baffinland noted that as the iron ore carriers will be undertaking international voyages, these vessels will require an International Anti-fouling System Certificate.
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby facilities have not been developed yet.
92. Proponent to ensure maintenance of necessary equipment and train personnel to respond to all sizes of potential spills in a self-sufficient manner.	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	<i>Milne Inlet and Mary River Site:</i> Active In Compliance	Baffinland developed contingency plans to respond to spills both on land and at sea. The plans outline the equipment to be used in the event of a spill, as well as the roles and responsibilities and necessary training to maintain. In 2023, training of Baffinland staff on its <i>Oil Pollution Prevention Plan</i> (2024) was conducted by consultant Navenco Marine. ⇒ <i>Emergency Response Plan</i> (2020) ⇒ <i>Spill Contingency Plan</i> (2021) ⇒ <i>Oil Pollution Emergency Plan</i> (2023) ⇒ <i>Spill at Sea Response Plan</i> (2023)
	<i>Steensby Inlet:</i> Not Yet Active	<i>Steensby Inlet:</i> Not Yet Active	The Steensby facilities have not been developed yet.
93. Prior to construction, based on vessel selection, reassess the risk analysis of using vessel-based fuel storage at Steensby Inlet, including containment failure under a range of winter ice conditions.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	The Steensby facilities have not been developed yet.
94. Consult directly with affected communities regarding its plans for over-wintering of fuel in Steensby Inlet.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	The Steensby facilities have not been developed yet.
95. Meet or exceed all regulatory regulations and requirements to the practice of overwintering of a fuel vessel at Steensby Inlet with reporting to NIRB and TC.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	The Steensby facilities have not been developed yet.
96. Update the NIRB on the results of all compliance monitoring and site inspections undertaken by government agencies for the overwintering of a fuel vessel at Steensby Inlet.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	The Steensby facilities have not been developed yet.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
97. Prior to iron ore shipping, conduct fuel spill dispersion modelling that includes those items outlined in the condition to prevent impacts to the marine environment along the shipping route.	<i>Northern Route:</i> Active Not Yet Applicable	<i>Northern Route:</i> Active In Compliance	Revised oil spill modelling was conducted in 2015 for shipping from Milne Port with additional spill modelling carried out in 2018 for shipping along the Northern Route. ⇒ <i>Emergency Response Plan</i> (2020) ⇒ <i>Spill Contingency Plan</i> (2021) ⇒ <i>Oil Pollution Emergency Plan</i> (2023) ⇒ <i>Spill at Sea Response Plan</i> (2023)
	<i>Southern Route:</i> Not yet active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.
98. Incorporate the results of revised fuel dispersion modelling into its impact predictions for the marine environment and the spill response and emergency preparedness plans.	<i>Northern Route:</i> Active In Compliance	<i>Northern Route:</i> Active In Compliance	See Term and Condition 97. Baffinland noted that the spill modelling results highlighted the importance of spill prevention and the Spill at Sea Response Plan (SSRP) preparedness to minimize any adverse effects in the unlikely event of a fuel release of any size during vessel traffic into Milne Inlet. The SSRP was updated to append the results of additional fuel spill modelling carried out in 2018. The plans for ship to shore fuel transfers at Milne Port are updated on annually and approved by TC. ⇒ <i>Spill at Sea Response Plan</i> (2023)
	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.
99. <i>Modified for SOP:</i> Working with the MEWG, consider and identify priorities for conducting supplemental baseline assessments for the items outlined in the condition to improve predictions for potential impacts to marine wildlife.	<i>Northern Route:</i> Completed Accomplished	<i>Milne Port:</i> Completed Accomplished	Baseline assessment on this term and condition has been completed with additional supplemental baseline assessment completed pre-2021. Baffinland noted that current effort is focused on environment effects monitoring (EEM) using a number of different EEM programs to detect potential Project effects on marine mammals and marine environment. EEM will continue through the life of the project. ⇒ <i>DRAFT Marine Monitoring Plan</i> (2023)
	<i>Southern Route:</i> Non Compliance	<i>Southern Route:</i> Non Compliance	No information provided for the Southern Route on whether the items in the term and condition was completed.
100. Update the Shipping and Marine Wildlife Management plan to include avoidance of polynyas and mitigation measures designed for potential fuel spills along the shipping lane during the winter months.	<i>Northern Route:</i> Completed Accomplished	<i>Northern Route:</i> Completed Accomplished	Baffinland updated its Shipping and Marine Wildlife Management Plan to reflect adjustments to shipping operations through varying degrees of ice and the use of an ice-breaker vessel as an escort. In 2023, there were no fuel spills during shoulder (or open-water) season shipping, no interactions with the North Water Polynya and no ship strikes on marine mammals. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan</i> (2023)
	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.
101. <i>Modified for SOP:</i> Incorporate all items outlined in the condition into the appropriate	<i>Northern Route:</i> Active In Compliance	<i>Northern Route:</i> Active In Compliance	Baffinland discussed monitoring programs through the HTO involvement in the MEWG and TEWG, the NIRB's Marine Workshop and Baffinland's own engagement session. Inuit are also involved

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
monitoring plans to monitor for potential impacts to marine wildlife and habitat.			<p>directly as monitors and observers with Baffinland's monitoring programs such as the Bruce Head shore based observation, ship based observers, aerial surveys and more. Baffinland noted that its western science research is also compared against Inuit knowledge and observations, even if discrepancies exist, Inuit Qaujimajatuqangit can still trigger adaptive management practices. A summary of these changes with respect to the marine monitoring programs were provided in Baffinland's Marine Shipping and Vessel Management Report.</p> <p>⇒ 2023 Marine Mammal Aerial Survey Program Report (WSP, 2024)</p> <p>⇒ 2023 Bruce Head Shore-Based Monitoring Report (WSP, 2024)</p>
	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.
102. Ensure that routing of project vessels is tracked and recorded for both the southern and northern shipping routes, with data made real-time available to communities in Nunavut and Nunavik.	<i>Northern Route:</i> Active In Compliance	<i>Northern Route:</i> Active In Compliance	Baffinland continued its Shipping Monitoring Program in 2023 by ensuring vessel routing information is made publicly available via the Baffinland website, maintaining an Automatic Identification System (AiS) tracking system through Baffinland's Shipping Monitor's office in the MHTO building in Pond Inlet and hiring full-time employees to actively track daily Project vessel movement in the RSA.
	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.
103. Report to the NIRB regarding project related ship track and sea-ice information including all items outlined in the condition that outlines the effectiveness of mitigation of shipping impacts to marine wildlife.	<i>Northern Route:</i> Active In Compliance	<i>Northern Route:</i> Active In Compliance	<p>Baffinland reported information related to ship track and sea ice including the effectiveness of mitigation of shipping impacts to marine wildlife.</p> <p>⇒ 2023 Marine Mammal Aerial Survey Program</p> <p>⇒ 2023 Ship-based Observer Survey Program</p> <p>⇒ 2023 Daily Ship Tracks with Ice Imagery</p> <p>⇒ 2023 Marine Mammal Incidental Sightings</p>
	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.
104. Subject to safety conditions: (a) Plan shipping routes to/from Steensby Port to the south of Mill Island to prevent walrus disturbance. Provide incidence report if vessels are required to transit to the north of the island. (b) Summarize all incidences of significant deviations from the nominal shipping route presented in the FEIS and FEIS Addenda to/from Milne and Steensby Ports.	<i>Northern Route:</i> Active In Compliance	<i>Northern Route:</i> Active In Compliance	Baffinland noted that forty-one (41) minor deviations from the nominal shipping route were recorded within the RSA in 2023 with the majority of the shipping route deviations occurring to avoid shifting ice through the RSA at the start of the shipping season.
	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
105. Ensure that measures to reduce the potential for interaction with marine mammals particularly in Hudson Strait and Milne Inlet area identified and implemented prior to commencement of shipping operations.	<i>Northern Route: Active In Compliance</i>	<i>Northern Route: Active In Compliance</i>	Baffinland adhered to several mitigation measures to reduce potential interaction between marine wildlife and shipping including, but not limited to: no breaking land fast ice during shoulder season, no icebreaking to commence shipping season, vessels to reduce speed to 9 knots within RSA, defined shipping lanes and establishment of “no-go” zones, use of convoys to reduce sound exposure, and limiting vessel idling. A full list of mitigations is provided in the <i>2023 Annual Report</i> . Baffinland also noted that it intends to develop a 5-year monitoring program schedule in conjunction with the MEWG. For monitoring programs that have shown stable results consistent with baseline years for the duration of Project operations, Baffinland will suggest that not all programs need to continue on an annual basis. Following this engagement, Baffinland intends to adhere to a 5-year schedule that does not involve duplicating monitoring efforts each year. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan (2023)</i>
	<i>Southern Route: Not Yet Active</i>	<i>Southern Route: Not Yet Active</i>	The Steensby facilities have not been developed yet.
106. Ensure that shipboard observers are employed during seasons where shipping occurs and provided with the means to effectively carry out the duties. The role of shipboard observers should be taken into consideration in the design of any Project purpose-built ships.	<i>Northern Route: Active In Compliance</i>	<i>Northern Route: Active Deficient – In progress</i>	Baffinland utilized two vessels to complete the shipboard observer program during the fall program season (10-day period). Baffinland continues to partner with the Marine Mammal Observation Network (MMON) for the marine mammal incidental sighting program through contracted vessels. A total of 15 vessels participated in the MMON program in 2023 with most sightings consisting of ringed seal. Baffinland also referred the reader to Term and Condition 103 for the methods on the above mentioned programs. ⇒ 2023 Ship-based Observer Survey Program (WSP) ⇒ 2023 Marine Mammal Incidental Sightings
	<i>Southern Route: Not Yet Active</i>	<i>Southern Route: Not Yet Active</i>	The Steensby facilities have not been developed yet.
107. Revise the proposed 'surveillance monitoring' to improve the likelihood of detecting strong marine mammal, seabird, or seabird responses occurring too far ahead of the ship to be detectable by observers aboard the ore carriers.	<i>Northern Route: Active In Compliance</i>	<i>Northern Route: Active In Compliance</i>	As noted in Term and Condition 106, Baffinland partnered with the MMON for the marine mammal incidental sighting program with 15 vessels participating in 2023 and referred the reader to Term and Condition 103 for information on the MMON and shipboard observer programs. Baffinland also used other surveillance programs to better understand changes in marine mammal distributions patterns and behaviour such as the Bruce Head Shore-based Monitoring Program. ⇒ 2023 Ship-based Observer Survey Program (WSP) ⇒ 2023 Marine Mammal Incidental Sightings
	<i>Southern Route: Not Yet Active</i>	<i>Southern Route: Not Yet Active</i>	The Steensby facilities have not been developed yet.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
108. Ensure that data produced by the surveillance monitoring program is analyzed by experienced analysts (in addition to being discussed as proposed in the FEIS) to maximize effectiveness in providing baseline information and/or detecting potential effects. Data from the long-term monitoring should be treated with the same rigor.	<i>Northern Route: Active In Compliance</i>	<i>Northern Route: Active In Compliance</i>	Baffinland noted that sightings data collected as part of the shipboard observer program is analyzed by experienced marine mammal and seabird data analysts using industry best practice methodology. The NIRB notes that Baffinland refers to protocols on surveying marine animals but no reference was provided on the experienced analysts and how the data were treated from the observers and/or MMON. ⇒ 2023 Ship-based Observer Survey Program (WSP)
	<i>Southern Route Not Yet Active</i>	<i>Southern Route Not Yet Active</i>	The Steensby facilities have not been developed yet.
109. Conduct a monitoring program to confirm the predictions in the FEIS with respect to disturbance effects from ships noise on the distribution and occurrence of marine mammals. The survey shall be designed to address effects and include locations in Hudson Strait and Foxe Basin, Milne Inlet, Eclipse Sound and Pond Inlet	<i>Northern Route: Active In Compliance</i>	<i>Northern Route: Active In Compliance</i>	In 2023, Baffinland conducted aerial surveys, the Bruce Head shore-based monitoring program and the underwater acoustic monitoring program to monitor sound impact on marine mammals. Baffinland concluded that shipping noise in the RSA is lower than predicted in the FEIS and that behavioural effects from shipping on narwhal are limited to low-level disturbance effects that are localized and temporary in nature. As noted in Term and Condition 105, Baffinland intends to develop a 5-year monitoring program schedule in conjunction with the MEWG and any programs that have shown stable results consistent with baseline years, Baffinland will suggest that they not continue on an annual basis. ⇒ 2023 Underwater Acoustic Monitoring Program Report (Austin et al., 2024) ⇒ 2023 Marine Mammal Aerial Survey Program (WSP, 2024) ⇒ 2023 Bruce Head Shore-based Monitoring Program (WSP, 2024) ⇒ 2023 Ship-based Observer Survey Program (WSP, 2024) ⇒ Early Warning Indicators for Marine Mammals Tech Memorandum (Golder, 2020)
	<i>Southern Route Not Yet Active</i>	<i>Southern Route Not Yet Active</i>	The Steensby facilities have not been developed yet and no studies were conducted.
110. Immediately develop a monitoring protocol that includes acoustical monitoring to assess short, long term and cumulative effects of vessel noise on marine mammals and populations. Work with the MEWG to identify appropriate early warning indicators that will ensure rapid identification of negative impacts along southern and northern shipping routes.	<i>Northern Route: Active Deficient – In progress</i>	<i>Northern Route: Active Deficient – In progress</i>	Baffinland implemented several marine mammal programs since 2014 to evaluate the potential effects on vessel noise on marine mammals and marine mammal populations. In 2020, Baffinland provided the proposed early warning indicators (EWI), with the EWI selection of the decrease in proportion of immature narwhal. As part of the MEWG advisory process, an index of variability was incorporated into the EWI calculation, along with an estimate of error associated with the value. Baffinland noted that the threshold level needed to be reached as a proportion of immature narwhal recorded from Bruce Head is 0.137 to

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			<p>trigger EWI adaptive management practices. NIRB acknowledges that this has been in progress between Baffinland and the MEWG, although an early warning indicator is in place, there exists some questions around its effectiveness in respect to being able to catch early thresholds. The Board understands that this continues to be discussed and looks forward to an update in the following year's monitoring.</p> <p>⇒ 2023 Underwater Acoustic Monitoring Program Report (Austin et al., 2024)</p> <p>⇒ 2023 Marine Mammal Aerial Survey Program (WSP, 2024)</p> <p>⇒ 2023 Bruce Head Shore-based Monitoring Program (WSP, 2024)</p> <p>⇒ 2023 Ship-based Observer Survey Program (WSP, 2024)</p> <p>⇒ Early Warning Indicators for Marine Mammals Tech Memorandum (Golder, 2020)</p>
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed and the southern shipping route is not active.
111. Develop clear thresholds for determining if negative impacts as a result of vessel noise is occurring. Mitigation and adaptive management practices shall be developed to restrict negative impacts as a result of vessel noise.	<i>Northern Route: Active</i> Deficient – In progress	<i>Northern Route: Active</i> Deficient – In progress	<p>Baffinland has developed multiple indicators that are being monitored as population stock, behavioural response, immature narwhal ratio and change in underwater noise level. In 2023 Baffinland conducted aerial surveys, the Bruce Head shore-based monitoring program and the underwater acoustic monitoring program to monitor those indicators. Baffinland conclusion remains that the effects of vessel noise and shipping activities on marine mammals are within the range of predicted effects. This conclusion is not agreed by community members and different parties. This topic has been discussed through several MEWG meetings since monitoring has begun.</p> <p>⇒ 2023 Marine Mammal Aerial Survey Program Report (WSP, 2024)</p> <p>⇒ 2023 Bruce Head Shore-based Monitoring Program Report (WSP, 2024)</p> <p>⇒ 2023 Ship-based Observer Survey Program (WSP, 2024)</p> <p>⇒ EWIs for Marine Mammals Technical Memorandum (Golder, 2020)</p> <p>⇒ 2023 EWI Aerial Survey Results (WSP, 2024)</p>
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed and the southern shipping route is not active.
112. Prior to iron ore shipping, in conjunction with the MEWG, develop a monitoring protocol that includes acoustical monitoring that provides an assessment of the negative effects of vessel noise on marine mammals.	<i>Northern Route: Active</i> Deficient – In progress	<i>Northern Route: Active</i> Deficient – In progress	Refer to Terms and Conditions 110 and 111 for further information.
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
Consideration of early warning indicators and thresholds of impacts should be included.			
113. Conduct monitoring of marine fish and fish habitat including monitoring for Arctic char stock size and health condition in the <i>Inlets</i> , as recommended by the MEWG.	<i>Milne Inlet</i> : Active In Compliance	<i>Milne Inlet</i> : Active In Compliance	Baffinland monitors marine fish and fish habitat (including Arctic char and other species in the area) annually in consultation with the MEWG through the Marine Environmental Effects Monitoring and Aquatic Invasive Species Program. Modifications were incorporated to the marine fish program in 2023 based on feedback provided by the MEWG and stakeholders. ⇒ 2023 MMEMP and NIS/AIS Monitoring Program Report (WSP, 2024)
	<i>Steensby Inlet</i> Not Yet Active	<i>Steensby Inlet</i> Not Yet Active	The Steensby facilities have not been developed yet.
114. In the event of the development of a commercial fishery in Steensby Inlet or Milne Inlet-Eclipse Sound areas, in conjunction with the MEWG, shall update the monitoring program for marine fish and fish habitat to ensure that the ability to identify Arctic Char stock(s) and any changes in stock size and structure of affected stocks and fish health is maintained to address any monitoring issues relating to the commercial stock fishery.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	There are no commercial fisheries located in Steensby or Milne Inlet.
115. Continue to explore off-setting options in both the freshwater and marine environment to offset serious hard to fish which will result from the construction and infrastructure associated with the project.	<i>Milne Inlet</i> : Active In Compliance	<i>Milne Inlet</i> : Active In Compliance	Baffinland engaged with the five (5) affected communities throughout the regulatory process and afterwards. In 2023, Baffinland engaged with the communities of Arctic Bay and Pond Inlet to provide an overview of the proposed rocky reef habitat offsetting plan for the Milne Port Freight Dock with letters of support provided by the Hamlets. Monitoring results from the Milne Port Ore Dock offsetting works have proven to be effective at supporting biological activity.
	<i>Steensby Inlet</i> In Compliance	<i>Steensby Inlet</i> In Compliance	In 2023, Baffinland conducted several community engagement activities with the HTO members and Hamlet representatives to discuss marine and freshwater fisheries offsetting options proposed for the Steensby component. Input from these engagements has been used to refine the applications for Authorizations under the <i>Fisheries Act</i> . ⇒ <i>Community Engagement On Fisheries Offsetting–Steensby Component</i> (Knight Piesold, 2023)
116. Prior to construction, develop mitigation measures to minimize the effects of blasting on marine fish and fish habitat, marine water quality and wildlife that includes compliance with the Guidelines for the Use of	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	Blasting in the marine environment or in nearshore areas have not occurred for the Project. If required, Baffinland will provide operational control procedures in consultation with the MEWG and DFO to ensure the activity is in accordance with DFO guidance and best practices.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
Explosives in or Near Canadian Fisheries Waters.			
117. Ensure that blasting in, and near, marine water shall only occur during periods of open water. Blasting in, and near, fish-bearing freshwater should occur to the greatest degree possible in open water. Blasting during ice-covered periods must meet requirements established by DFO.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	Blasting in the marine environment or in nearshore areas have not occurred for the Project. If required, Baffinland will provide operational control procedures in consultation with the MEWG and DFO to ensure the activity is in accordance with DFO guidance and best practices.
118. Prior to construction, incorporate into the appropriate mitigation plan, thresholds for the use of specific mitigation measures meant to prevent or limit marine wildlife disturbance.	<i>Milne Inlet</i> : Accomplished Completed	<i>Milne Inlet</i> : Accomplished Completed	No marine construction activity occurred at Milne Port in 2023.
	<i>Steensby Inlet</i> Not Yet Active	<i>Steensby Inlet</i> Not Yet Active	The Steensby facilities have not been developed yet.
119. In conjunction with the MEWG, monitor ringed seal birth lair abundance and distribution for at least two years prior to the start of ice-breaking to develop a baseline, with continue monitoring over the life-time of the project.	<i>Northern Route</i> : Not Yet Applicable	<i>Northern Route</i> : Not Yet Applicable	No winter shipping has occurred during the current phase of the Project. Baffinland did not ice break during the early 2023 shoulder season and did not commence shipping until ice concentrations were less than 3/10ths. Further, Baffinland did not conduct ringed seal aerial surveys in 2023 as the 2021 surveys indicated that no additional aerial survey was not required as mitigations are functioning as intended. ⇒ <i>2021 Ringed Seal Aerial Survey Monitoring</i> Program (Golder, 2022) ⇒ <i>Marine Mammal Trigger Action Response Plan</i> (TARP, 2021)
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed yet.
120. Ensure, subject to vessel and human safety, that all Project shipping adhere to mitigation measures outlined in the condition for the protection of marine wildlife.	<i>Northern Route</i> : Active In Compliance	<i>Northern Route</i> : Active In Compliance	Refer to Terms and Conditions 103 and 105. In 2023, Baffinland ships had no significant deviations from the shipping route and most ships were compliant with the 9-knot speed limit. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan</i> (2023)
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed yet.
121. Immediately report any accidental contact by Project vessels with marine mammals or seabird colonies to DFO and ECCC, respectively.	Active In Compliance	Active In Compliance	There were no observations of accidental contact between Project vessels and marine mammals or seabird colonies in 2023. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan</i> (2023)
122. Summarize and report accidental contact by Project vessels with marine mammals or seabird colonies through the applicable monitoring report.	Active In Compliance	Active In Compliance	There were no marine mammal or seabird strikes reported in 2023. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan</i> (2023)
123. Provide sufficient marine mammal observer coverage on Project vessels to ensure that collisions with marine mammals and seabird	<i>Northern Route</i> : Active In Compliance	<i>Northern Route</i> : Active In Compliance	As noted in Term and Condition 106, Baffinland partnered with the MMON for the marine mammal incidental sighting program with 15 vessels participating in 2023. No ship strikes on marine mammals (or

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
colonies are observed and reported throughout the lifecycle of the Project. The marine wildlife observer protocol should include those items outlined in the condition.			near misses) were recorded during the active monitoring periods and since the start of the Project. The only seabird strike occurred in 2019. ⇒ 2023 Ship-based Observer Survey Program (WSP) ⇒ 2023 Marine Mammal Incidental Sightings
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed yet.
124. Prohibit all Project employees (while on active employment) from recreational boating, fishing and harvesting of marine wildlife in Project areas, including the <i>Inlets</i> .	Active In Compliance	Active In Compliance	No incidences of Project personnel hunting or fishing within the Project Development Area occurred in 2023. ⇒ <i>Hunting and Harvesting Policy</i> (2013) ⇒ 2023 Terrestrial Environment Annual Monitoring Report (EDI, 2024)
125. Prior to the use of acoustic deterrent devices, carry out consultations with communities along the shipping routes and nearest to both <i>Ports</i> to assess acceptability of the devices. Feedback from consultation should be incorporated into the mitigation plan.	Not Yet Applicable	Not Yet Applicable	No acoustic deterrents were used by the Project to date.
125 (a) Consult with potentially affected communities and groups, particularly the HTOs regarding the identification of Project vessel anchor sites and potential areas of temporary refuge for Project vessels along the shipping routes within the Nunavut Settlement Area. Feedback from the consultation shall be incorporated.	Active In Compliance	Active In Compliance	Baffinland continued to engage with the MHTO and the Hamlet of Pond Inlet to discuss potential concerns associated with its shipping operations, including discussions related to anchorage sites.
126. Design monitoring programs to ensure that local users of the marine area in communities along the shipping route have opportunity to be engaged throughout the life of the Project in assisting with monitoring and evaluating potential Project-induced impacts and changes in marine mammal distributions.	<i>Northern Route</i> : Active In Compliance	<i>Northern Route</i> : Active In Compliance	Baffinland referred the reader to Term and Condition 101 for information on this condition. A total of 15 individuals were employed from Pond Inlet (10), Arctic Bay (1), Igloolik (1), and Iqaluit (3) for the 2023 marine monitoring programs and a total of 12 ship monitors supported the planning and monitoring of shipping season activities.
	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	The Steensby facilities have not been developed yet.
127. Ensure communities and groups in Nunavik are kept informed of Project shipping activities and are provided with opportunity to participate in the continued development and refinement of shipping related monitoring and mitigation plans.	<i>Southern Route</i> Not Yet Active	<i>Southern Route</i> Not Yet Active	This term and condition is specific to Steensby which does not currently have shipping activity; however, Baffinland noted that it provides information related to shipping activities through Baffinland's website and Baffinland's Shipping Facebook page.
128. Consult with local communities as fish habitat off-setting options are being considered and demonstrate incorporation of	<i>Milne Inlet</i> : Accomplished Completed	<i>Milne Inlet</i> : Accomplished Completed	In 2023, Baffinland engaged with the communities of Arctic Bay and Pond Inlet to provide an overview of the proposed rocky reef habitat offsetting plan for the Milne Port Freight Dock with letters of support provided by the Hamlets.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
this input in the design of the Fish Habitat Off-Setting Plan.			Monitoring results from the Milne Port Ore Dock offsetting works have proven to be effective at supporting biological activity.
	<i>Steensby Inlet</i> Not Yet Active	<i>Steensby Inlet</i> Not Yet Active	In 2023, Baffinland conducted several community engagement activities with the HTO members and Hamlet representatives to discuss marine and freshwater fisheries offsetting options proposed for the Steensby component. Input from these engagements has been used to refine the applications for Authorizations under the <i>Fisheries Act</i> . ⇒ <i>Community Engagement On Fisheries Offsetting–Steensby Component</i> (Knight Piesold, 2023)
129. Encouraged to engage in the work of the Qikiqtaaluk Socio-Economic Monitoring Committee (QSEMC), endeavoring to identify areas of mutual interest into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities and the North Baffin region as a whole.	Active In Compliance	Active In Compliance	Baffinland participated in the May 2023 QSEMC meeting providing updates on the project. A term of reference for the Socio-Economic Monitoring Working Group (SEMWG) was developed in 2019. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024) ⇒ <i>2023 QSEMC Correspondences</i>
130. Consider establishing and coordinating with smaller socio-economic working groups to meet specific monitoring requirements throughout the life of the Project.	Active In Compliance	Active In Compliance	Baffinland continues to engage with the QSEMC, SEMWG, and North Baffin communities on the Project's monitoring program. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024) ⇒ <i>2023 SEMWG Correspondences</i>
131. The QSEMC is encouraged to engage in monitoring of demographic changes including the movement of people into and out of the North Baffin communities and the territory with information used in conjunction with monitoring data obtained by the Proponent	Active In Compliance	Active In Compliance	<i>This term and condition is directed to the QSEMC and no additional information was received</i> Baffinland provided demographic change information in the <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024).
132. Encouraged to partner with other agencies in the North Baffin region, the Municipal Training Organization and the GN in developing/implementing programs which encourage Inuit to remain living in their home communities while seeking ongoing and progressive training and development.	Active In Compliance	Active In Compliance	As in other years, in 2023, Baffinland partnered with local and regional governmental agencies and educational institutions to support local communities and promote training programs for residents while limiting the potential for out migration.
133. Encouraged to work with the QSEMC, with the GN and other relevant stakeholders to design and implement a voluntary survey to be completed by its employees on an annual basis in order to track housing status and migration intentions. Non-confidential findings to be reported to the GN and NIRB.	Active In Compliance	Active In Compliance	Baffinland regularly administers a voluntary Inuit Employee Survey with surveys completed between October and December 2023. In addition, in 2023, the survey underwent minor modification based on feedback received from the QIA. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024) ⇒ <i>2023 Inuit Employee Survey Report</i> (ERM, 2024)

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
134. Provide a summary of employee origin information including information outlined in the condition in order compare predicted labour availability and employment opportunities with actual levels of employment.	Active In Compliance	Active In Compliance	Baffinland continues to collect data on the origin, number, and ethnicity of employees and contractors who work on the Project which is presented in the <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024)
135. Encouraged to consider offering additional options for work/study programs available to Project employees.	Active In Compliance	Active In Compliance	Baffinland provides several training opportunities to staff including online training for employees on site.
136. Encouraged to work with training organizations and/or government departments offering mine-related or other training in order to provide additional training opportunities for employees.	Active In Compliance	Active In Compliance	Baffinland continues to engage with the Mary River SEMWG in which QIA, CIRNAC and the GN are participating.
137. Prior to construction, develop an easy referenced listing of formal certificates and licenses that may be acquired via on-site training or training during employment at Mary River. Listing to be updated on an annual basis.	Active In Compliance	Active In Compliance	Baffinland has developed several qualifications available to employees and that can be used for other employment. In 2023, Inuit training totalled 34,350 hours, equivalent to 29.9% of the total training provided by Baffinland.
138. Encouraged to work with the QIA to ensure timely development of effective Inuit training and work-ready programs.	Active In Compliance	Active In Compliance	Baffinland noted that Baffinland and QIA are continuing to support the Mary River Impact and Benefit Agreement (IIBA) implementation with the Qikiqtani Skills and Training for Employment Partnership (Q-STEP) Inuit Training and Development Program. In 2023, Baffinland held 15 community based Work Ready Program (WRP) sessions, with a total of 55 participants. In addition, in 2023, QIA informed Baffinland that they will be creating an online version of the WRP to increase the availability of the training for all Nunavut communities. In Q1 and Q2 of 2024, Baffinland and QIA will co-develop the online WRP, where the module is anticipated to launch in Q3.
139. Prior to construction, undertake and provide results of a detailed labor market analysis which provides quantitative predictions on the number of employees from southern Canada and foreign markets. Within 90 days of receipt of the Project Certificate, submission of an updated labor market analysis must be submitted.	Active In Compliance	Active In Compliance	In 2023, Baffinland and QIA continued to explore development of a Skills Equivalency Assessment Template which is designed to assess Inuit skills and knowledge acquired through traditional skills and training.
140. Encouraged to survey Nunavummiut employees as they are hired and specifically note the level of education obtained and whether the incoming employee resigned or left an educational institute to take up employment with the Project.	Active In Compliance	Active In Compliance	In 2022, Baffinland updated its tracking system to be able to compile and report data collected from potential candidates. Baffinland noted that long term trends are difficult to discern as 2022 was the first year Baffinland was able to report on Inuit applicant information related to current employment and educational program status.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
141. Prior to construction, encouraged to work with the QIA in order to prioritize the provision of training of Inuit to serve as employees in monitoring or other such capacities.	Active In Compliance	Active In Compliance	Baffinland indicated that it continues to work with the QIA to promote Inuit training, education, and employment initiatives which are consistent with the provisions outlined in the IIBA. Detailed information on training are available in the <i>2023 Socio-Economic Monitoring Report</i> (Aglu and ERM, 2024).
142. Encouraged to address the potential direct and indirect effects of using various Inuktitut dialects as well as other spoken languages which may lead to employee alienation.	Active In Compliance	Active In Compliance	Baffinland noted that the working language at site is English; however, the company supports the principle of increased use of Inuktitut in the workplace and in 2020 updated <i>Inuktitut in the Workplace Policy</i> and was rolled out at the Project sites. In 2022, the Inuit Employee Survey also included a question on language. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024) ⇒ <i>2023 Inuit Employee Survey Report</i> (ERM, 2024)
143. Encouraged to consider the use of both existing and innovative technologies to ensure Project employees are able to keep in contact with family and friends.	Active In Compliance	Active In Compliance	Internet and telephone access are available free of charge to all employees in the accommodation complexes.
144. Encouraged to make requirements for employment clear in its work-readiness and other programs and documentation.	Active In Compliance	Active In Compliance	Baffinland's Community Liaison Officers identify employment prerequisites and requirements when individuals drop off their resumes at the local offices.
145. Encouraged to work with the GN and the QSEMC to monitor the barriers to employment for women.	Active In Compliance	Active In Compliance	Baffinland provided information related to potential barriers to employment for women in the <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024).
146. The GN and the QIA are encouraged to investigate the possibility for Project revenue streams to support initiatives or programs which offset or subsidize childcare for Project employees.	Active Deficient in-progress	Active Deficient in-progress	<i>This term and condition is directed to the GN and QIA and no information was received.</i>
147. Encouraged to work with the GN and the Nunavut Housing Corporation to investigate options and incentives which might enable and provide incentive for employees living in social housing to maintain employment as well as to negotiate for an obtain manageable rental rates.	Active In Compliance	Active In Compliance	Baffinland continues to engage and discuss housing-related issues with the GN and the and will advocate for more work-friendly social housing policies for its workers. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024)
148. Encouraged to undertake collaborative monitoring in conjunction with the QSEMC's monitoring program which addresses Project harvesting interactions and food security and broad indicators of dietary habits.	Active In Compliance	Active In Compliance	This topic continues to be tracked through the QSEMC process, community engagement conducted for the Project, and related information. Baffinland provided funding to support QIA in conducting a Pond Inlet Country Food Baseline Study which started in 2021. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024) ⇒ <i>2023 Inuit Employee Survey Report</i> (ERM, 2024)
149. Prior to operations, required to undertake an analysis of the risk of temporary mine	Accomplished Completed	Accomplished Completed	In 2022, Baffinland submitted an updated report to the previous 2014 closure planning report in addition to the <i>Temporary Closure</i>

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
closure giving consideration to the effects of such to the North Baffin region.			<i>Planning: Socio-Economic Considerations for the Mary River Project</i> (Jason Prno Consulting Services Ltd, 2022) that considers risks for temporary mine closure and how communities in North Baffin may be affected.
150. <i>Modified for SOP:</i> Ensure that conditions are met to limit impacts of the Project upon visitors, researchers and/or beneficiary users of Sirmilik National Park and Tallurutiup Imanga National Marine Conservation Area.	Active In Compliance	Active In Compliance	Baffinland continues to advise Parks Canada of shipping activity through publicly accessible information. All aircraft transiting near the Park and Conservation area took into consideration the recommended flight altitude. Baffinland provided vessels tracking on its website. ⇒ <i>2023 Terrestrial Environmental Annual Monitoring Report</i> (EDI, 2024)
151. Encouraged to investigate measures and programs designed to assist Project employees with home ownership or access to affordable housing options.	Active In Compliance	Active In Compliance	In 2023, Baffinland continued to provide basic financial literacy training, which covered topics such as budgeting that considers rent/housing as well as loans In the 2023 Inuit Employee Survey, not one respondent indicated that they had purchased a home since obtaining employment.
152. QIA is encouraged to provide the NIRB and the QSEMC with information regarding the effectiveness of any provisions within the Inuit Impact Benefit Agreement which may require larger contracts be broken into smaller contracts.	Active Deficient in-progress	Active Deficient in-progress	<i>This term and condition is directed to the QIA and no information was received.</i> Baffinland noted that it continued to support increased access to Inuit firms for contracting opportunities at the Project.
153. Encouraged to employ a mental health professional to provide counselling to Inuit and non-Inuit employees in order to positively contribute toward employee health and well-being.	Active In Compliance	Active In Compliance	Baffinland's benefit plan includes an Employee and Family Assistance Program (EFAP) which offers all permanent employees and their dependents professional short-term counselling. On-site Inuit Cultural Advisors are also available for the Project's Inuit employees. In addition, Baffinland hired two (2) on-site mental health counsellors in 2022 with the service continuing in 2023. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024)
154. Work with the GN and the QSEMC to monitor potential indirect effects of the projects upon health and well-being.	Active In Compliance	Active In Compliance	Baffinland provided information on potential indirect effects of the Project within the <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024). Baffinland continues to engage with the QSEMC and the SEMWG related to this topic. ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024)
155. Encouraged to provide the NIRB with an updated report on its development of mitigation measures and plans to deal with potential cultural conflicts that may occur.	<i>Milne Inlet and Mary River Site: Accomplished Completed</i>	<i>Milne Inlet and Mary River Site: Accomplished Completed</i>	Baffinland continues to deliver cultural workshops and activities at site for all employees to promote employee cohesion.
	<i>Steensby Inlet: Not Yet Active</i>	<i>Steensby Inlet: Not Yet Active</i>	The Steensby facilities have not been developed yet.
156. Encouraged to assist with the provision and/or support of recreation programs and opportunities within the potentially affected communities in order to mitigate potential	Active In Compliance	Active In Compliance	Through the IIBA, Baffinland established an Ilagiiktunut Nunalinnullu Pivalliajutisat Kiinaujat Fund to support participation in community projects, youth and Elder programs, hunter support activities, cultural learning and revitalization, social support programs for families and more.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
impacts of employees' absence from home and community life.			
157. Consider providing counselling and access to treatment programs for addictions, domestic parenting, and marital issues that affect employees and/or their families.	Active In Compliance	Active In Compliance	Baffinland's employee benefit plan includes an EFAP, which offers all permanent employees and their dependents access to professional short-term counselling on an as-needed basis. ⇒ 2023 Socio-economic Monitoring Report (Aglu and ERM, 2024)
158. Encouraged to work with the GN and other relevant parties to develop a Human Health Working Group to monitor indirect Project impacts to health and social services.	Active In Compliance	Active In Compliance	Baffinland engages with the GN on its Socio-economic Monitoring Program (SEMP) and other general socio-economic issues through the QSEMC the SEMWG, with the GN being an active participant Baffinland included indicator data related to pressure on the existing health and social services. ⇒ 2023 Socio-economic Monitoring Report (Aglu and ERM, 2024)
159. Encouraged to work with the GN to develop an effects monitoring program that captures increases to community based and airport infrastructure in the LSA and Iqaluit.	Active In Compliance	Active In Compliance	Baffinland continues engage the GN directly and through their membership in the QSEMC, SEMWG and the Mary River SEMP. In 2023, Baffinland's utilization of community infrastructure, particularly airports, increased compared to previous years but remained lower than in pre-pandemic years. ⇒ 2023 Socio-economic Monitoring Report (Aglu and ERM, 2024)
160. The GN and the QIA are encouraged to cooperate to ensure that benefits are in a broad sense distributed across impacted communities and demographic groups that best offsets Project related impacts to infrastructure or services.	Active Deficient in-progress	Active Deficient in-progress	<i>This term and condition is directed to the QIA and the GN, and no information was received.</i> Baffinland referred the reader to the reporting under Term and Condition 167 for additional information on benefits, royalties and taxation.
161. The GN should be prepared for the potential need for increased policing to handle on-going Project related demographic changes in subsequent crime prevention.	Active Deficient in-progress	Active Deficient in-progress	<i>This term and condition is directed to the GN and no information was received.</i> Baffinland noted that it regularly engages the GN on the Project's SEMP.
162. Make all reasonable efforts to engage Elders and community members of the North Baffin communities for input into monitoring programs and mitigative measures to ensure that they are informed by traditional activities, cultural resources and land-use.	Active In Compliance	Active In Compliance	Community members and other Project stakeholders continue to provide input that helps guide the development of monitoring programs and mitigation measures. In 2022 Baffinland hired Inuit Knowledge Holders in each of the five (5) North Baffin communities and in 2023 hired additional Inuit Knowledge Holders in the communities of Kimmirut and Kinngait. In addition, Baffinland hosted various meetings in each of the five (5) North Baffin communities and with community groups (e.g., MHTO). ⇒ 2023 MEWG Meeting Records ⇒ 2023 TEWG Meeting Records
163. Continue to engage and consult with the communities of the North Baffin region to ensure that Nunavummiut are kept informed about Project activities.	Active In Compliance	Active In Compliance	Baffinland hosted various meetings in 2023 in each of the five (5) communities and with public groups to ensure Nunavummiut are kept informed on Project activities. In addition, a workshop was held in the fall of 2023 to provide an update on the Steensby Component and how Inuit Qaujimajatuqangit was integrated into the plans.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
			⇒ <i>2023 Engagement Records</i>
164. Provide notification to communities regarding scheduled ship transits throughout the RSA including Eclipse Sound and Milne Inlet. Real-time data should be made available. Changes to proposed shipping routes should be provided to the MEWG, the community of Pond Inlet and communities in the region.	<i>Northern Route: Active In Compliance</i>	<i>Northern Route: Active In Compliance</i>	Baffinland uses global vessel monitoring and tracking services to actively track vessels in real time and make that information publicly available on their website as well as in their office in Pond Inlet through their Shipping Monitors. Baffinland continues to communicate changes to the proposed shipping schedule in weekly emails. ⇒ <i>Marine Shipping and Vessel Management Report (2023)</i>
	<i>Southern Route: Not Yet Active</i>	<i>Southern Route: Not Yet Active</i>	The Steensby facilities have not been developed yet.
165. Encouraged to provide buildings along the rail line and Tote Road for emergency shelter purposes to be made available for employees and land users of the area.	<i>Milne Inlet Tote Road: Active In Compliance</i>	<i>Milne Inlet Tote Road: Active In Compliance</i>	Baffinland has four (4) refuge shelter stations at KM 33, 40, 60, and 69 along the Tote Road. In 2023, Baffinland assisted or was in standby in six (6) separate search and rescue incidents. ⇒ <i>Emergency Response Plan (2020)</i> ⇒ <i>Roads Management Plan (2020)</i>
	<i>Steensby Railway Corridor: Not Yet Active</i>	<i>Steensby Railway Corridor: Not Yet Active</i>	The Steensby railway and facilities have not been developed yet.
166. Ensure through consultation efforts and public awareness campaigns that the public has access to shipping operations personnel for transits into and out of both <i>Ports</i> via telephone or internet contact to ensure information regarding ice conditions and ship movements can be shared.	<i>Milne Inlet: Active In Compliance</i>	<i>Milne Inlet: Active In Compliance</i>	Ship movement information is available via telephone, email and on Baffinland's website. Baffinland also has an office in Pond Inlet with Shipping Monitors that can provide information during daily office hours. ⇒ <i>Hunter and Visitor Access Procedure (2020)</i>
	<i>Steensby Inlet Not Yet Active</i>	<i>Steensby Inlet Not Yet Active</i>	The Steensby facilities have not been developed yet.
167. Encouraged to enter into negotiations for a Development Partnership Agreement (DPA) with the GN.	Active In Compliance	Active In Compliance	In 2013, Baffinland reached out to the GN to develop a DPA; however, that expired in 2016. In 2019, Baffinland and the GN signed a Memorandum of Understanding and have identified four (4) priority areas for continued collaboration. This term and condition has been upgraded to in compliance given the efforts put forward by Baffinland and the GN, while noting the original DPA program for the term and condition does not exist anymore. <i>This term and condition is also directed to the GN and no information was received.</i>
168. Outline variables that are relevant to the Project and which should be adopted by the QSEMC monitoring program, including population movement, barriers to employment, project harvesting interactions and indirect Project effects on home life.	Active In Compliance	Active In Compliance	Information for this term and condition provided in Baffinland's 2023 <i>Annual Report</i> . ⇒ <i>2023 Socio-economic Monitoring Report (Aglu and ERM, 2024)</i>

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
169. Provide summaries to the NIRB on the monitoring data collected regarding regional and cumulative economic effects associated with the Project and any proposed mitigation measures.	Active In Compliance	Active In Compliance	A summary of monitoring data related to regional and cumulative economic effects was provided in Baffinland's <i>2023 Annual Report</i> . ⇒ <i>2023 Socio-economic Monitoring Report</i> (Aglu and ERM, 2024)
170. To minimize potential caribou-railway interactions, include an updated Terrestrial Wildlife Management and Monitoring Plan (TWMMP) for caribou monitoring efforts including weekly winter track surveys and bi-monthly surveys in the summer and fall.	<i>Mary River Tote Road</i> : Active In Compliance	<i>Mary River Tote Road</i> : Active In Compliance	Baffinland noted that no caribou tracks were observed following snow track surveys conducted in the spring of 2023 along the Milne Inlet Tote Road. ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2024)
	<i>Steensby Inlet Railway</i> Not Yet Active	<i>Steensby Inlet Railway</i> Not Yet Active	The Steensby railway and facilities have not been developed yet.
171. Include within the TWMMP, a commitment to establish deterrents along the railway and Tote Road embankments at any areas where the movement of caribou presents a likelihood of mortality to occur.	<i>Mary River Tote Road</i> : Accomplished Completed	<i>Mary River Tote Road</i> : Accomplished Completed	Areas that may be used by caribou were identified in the FEIS and mitigation measures are described in the <i>Terrestrial Environment Mitigation and Monitoring Plan</i> (2012). To date, deterrents along the Tote Road has not been required. ⇒ <i>2023 Terrestrial Environment Annual Monitoring Report</i> (EDI, 2024)
	<i>Steensby Railway</i> Not Yet Active	<i>Steensby Railway</i> Not Yet Active	The Steensby railway and facilities have not been developed yet.
172. Encouraged to provide the GN with evidence that the vessel intended for use for the overwintering of fuel has been designed and certified for use under the operational conditions. Proof of vessel owners insurance policies are required.	Not Yet Active Not Yet Applicable	Not Yet Active Not Yet Applicable	There is no overwintering of fuel associated with the active phase of the Project.
173. Employ best practices and meet all regulatory requirements during ship to shore and other marine based fuel transfer events.	Active In Compliance	Active In Compliance	Following updates to the <i>Oil Pollution Emergency Plan</i> in 2023, additional training was provided to Baffinland staff regarding marine spill response and to ensure spill readiness. ⇒ <i>Spill Contingency Plan</i> (2021) ⇒ <i>2023 Oil Pollution Emergency Plan – Milne Inlet</i> (2024) ⇒ <i>2023 Oil Pollution Prevention Plan – Milne Inlet</i> (2024) ⇒ <i>Spill at Sea Response Plan</i> (2015)
174. Proponent and the Canadian Coast Guard (CCG) to provide spill response equipment and annual training to Nunavut communities along the shipping route.	Active In Compliance	Active In Compliance	In 2015, the CCG noted that provision of spill response equipment and training to communities was the responsibility of the CCG. To date no information has been provided by the CCG on this term and condition.
175. In coordination with the QIA and the HTOs of the North Baffin communities and Coral Harbour, provide updates to the Shipping and Marine Wildlife Management Plan to include adaptive management measures to	<i>Southern Route</i> : Not Yet Active	<i>Southern Route</i> : Not Yet Active	There is no winter shipping associated with the active phase of the Project.

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
take should the placement of route markers along the ships track during ice breaking not prove to be feasible for marking the route.			
176. Revise the spill planning to include additional trajectory modelling for Hudson Strait, where walrus concentrate, as well as Milne Inlet, Eclipse Sound and Pond Inlet during winter conditions.	Northern Route: Active In Compliance	Northern Route: Active In Compliance	Revised oil spill modelling was conducted by Baffinland in 2015 for the Northern Shipping Route with input from community members. ⇒ <i>Milne Inlet Spill Modelling Report Fuel Spill Modelling: Northern Shipping Route Open Water Season - Milne Inlet, Eclipse Sound, Pond Inlet</i> (AMEC, 2015) ⇒ <i>Spill at Sea Response Plan</i> (2015)
	Southern Route: Not Yet Active	Southern Route: Not Yet Active	Baffinland noted that updated spill trajectory modelling will be provided for areas of Hudson Strait prior to the commencement of bulk fuel shipping to the Steensby Port area
177. Enroll any foreign flagged vessels commissioned for Project-related shipping within Canadian waters into the relevant foreign program, equivalent to TC's Marine Safety Delegated Statutory Inspection Program.	Active In Compliance	Active In Compliance	Ship owners/operators are responsible for enrolling their foreign flagged vessel with the appropriate program; however, Baffinland has included this requirement in their shipping contracts with all vessel operators.
178. Subject to safety requirements, require all Project vessels to maintain a route to the south of Mill Island to prevent disturbances to walrus and walrus habitat.	Southern Route: Not Yet Active	Southern Route: Not Yet Active	The Steensby facilities have not been developed yet, and no shipping occurred.
179. Not to exceed 20 ore carrier transits to Steensby Port per month during open water season and total of 242 transits per year.	Southern Route: Not Yet Active	Southern Route: Not Yet Active	The Steensby facilities have not been developed yet, and no shipping occurred.
179 (a) Until December 31, 2024, the total volume of ore must not exceed 6.0 million tonnes per annum (Mtpa) and the Proponent is approved to ship up to 0.9 Mtpa of "stranded ore". Total volume to return to 4.2 Mtpa after December 2024.	Active In Compliance	Active In Compliance	In 2023, Baffinland shipped a total of 6.1 Mt of iron ore during the shipping season.
179 (b) Until December 31, 2024, the total volume of ore transported along the Tote Road must not exceed 6.0 Mtpa in any calendar year. Total volume to return to 4.2 Mtpa after December 2024.	Active In Compliance	Active In Compliance	In 2023, Baffinland transported approximately 5.5 Mt of iron ore by truck on the Tote Road slightly lower than 2022 (~ 5.7 Mt).
179 (c) Support third party to conduct bi-annual performance audit of commitments made for every Project Certificate terms and conditions, and the Inuit Impact Benefit Agreement. Condition to remain in force for duration of project.	Active In Compliance	Active In Compliance	Baffinland submitted two (2) third-party audits to the NIRB regarding their compliance with the Project Certificate and the IIBA in October 2022 and March 2023 covering the year of 2022. The first Performance Audit Report for the 2023 year was submitted in October 2023. ⇒ <i>Agree-Upon Procedures on the Commitments Audit Protocol Report to the NIRB for the period ending June 30, 2023</i> (BDO, 2023) and <i>period ending December 31, 2023</i> (BDO, 2023)

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
180. The MEWG shall invite a representative from Makivik Corporation to be a member of the group.	<i>Southern Route:</i> In Compliance	<i>Southern Route:</i> In Compliance	Makivvik has been a member of the MEWG since 2013 and receives MEWG related correspondences. In 2023, Makivvik was sent MEWG meeting minutes and one representative attended one meeting virtually. ⇒ <i>2023 MEWG Meeting Records</i>
181. Regardless of whether Makivik Corporation participates as a member of the MEWG, the group will provide Makivik with regular updates throughout the life cycle of the project.	<i>Southern Route:</i> In Compliance	<i>Southern Route:</i> In Compliance	Makivvik is a member of the MEWG and receives copies of all meeting materials. ⇒ <i>2023 MEWG Meeting Records</i>
182. Make available any ship route deviation routes provided to the NIRB to Makivik Corporation.	<i>Southern Route:</i> Not Yet Active	<i>Southern Route:</i> Not Yet Active	The Steensby facilities have not been developed yet, and no shipping occurred. Baffinland noted that it engaged with Makivvik in December 2023 to provide an update on the Steensby Component of the Mary River Project.
183. Collaborate with the MEWG to develop impact avoidance or mitigation strategies for protection of the marine environment. The Proponent shall implement any direction from the DFO for any avoidance or mitigation measures including the cessation of any activity of the protection of the marine environment.	Active Deficient in-progress	Active In Compliance	Baffinland continued to consult the MEWG, DFO and Inuit stakeholders when developing or enhancing impact avoidance and mitigation strategies for the protection of the marine environment. DFO has not provided any directions to Baffinland with respect to this term and condition noting that “within DFO’s mandate, there has not been a situation that provided sufficient evidence that there would be imminent negative impacts to the marine environment such that it required a direction”. Baffinland noted that it will continue to work with stakeholder to review and guide marine monitoring programs and shipping mitigation and management strategies on an annual basis. ⇒ <i>DRAFT 2023 Shipping and Marine Wildlife Management Plan (2023)</i> ⇒ <i>2023 Marine Shipping and Vessel Management Report (2023)</i>
184. Collaborate with the MEWG to review the status of compliance with, and implementation of, all of the terms and conditions in Project Certificate No. 005 related to marine environmental protection.	Active Deficient in-progress	Active In Compliance	Refer to Terms and Conditions 77, 179(c) and 183.
185. All project related shipping associated with the Northern Shipping Route shall observe the following conditions, subject to the variances and/or exceptions: 1) To avoid breaking landfast ice at all times during the shipping season. 2) To confirm a continuous path of 3/10th ice concentrations along the Northern Shipping route is prior to shipping. 3) To plan for and cease all shipping from Milne Port by October 31.	Active In Compliance	Active In Compliance	Baffinland noted that shipping season commenced on August 9 th , 2023 and ended October 31 st , 2023 when the last vessel exited the RSA. Shipping commenced in August once it was confirmed by an ice analyst that ice concentrations met the 3/10 th ice conditions. However, Baffinland noted due to the ice still showing 9/10 th concentration through Eclipse Sound in early August, Baffinland proposed a variance to Term and Condition 185 on from the Hamlet and MHTO seeking to contract the CCG to provide escort through the heavy ice conditions. Letters of support were provided to Baffinland on August 9 th from the

Term & Condition	Compliance Achievement 2022-2023	Compliance Achievement 2022-2023	NIRB Comment
In the event a need for variance or an exceptional circumstance arises due to ice conditions, the Proponent is required to provide a detailed written description to the NIRB, QIA, Hamlet of Pond Inlet and MHTO clearly demonstrating meeting the additional requirements of the term and condition under a proposed variance.			Hamlet and MHTO. Baffinland confirmed with the CCG that no ice breaking occurred. Baffinland submitted a second request to the MHTO and Hamlet requesting feedback on the concept of shipping past October 31 st (another variance to the term and condition) to November 15 th due to unanticipated delays with the start of the season. However, Baffinland did not extend the season past October 31 st .
186. Construct and maintain hunters access route(s) in and around the Milne Inlet Tote Road. The specific location of hunters' access route(s) shall be confirmed based upon input from the MHTO and the QIA.	Active In Compliance	Active In Compliance	Baffinland continues to work with the MHTO for the proposed trail modification at the Milne Inlet Tote Road KM 13. Pending the issuance of the required Land Use Permit and the existence of frozen water conditions, construction of the KM 13 trail will begin.
187. Resource an annual audit of dust impacts and mitigations associated with project activities to be completed by a third party acceptable to the responsible parties.	Active In Compliance	Active Deficient – In progress	The dust audit was conducted by Nunami Stantec with the involvement of the five (5) North Baffin communities. The final report was submitted to the NIRB in February 2023. Baffinland noted to the NIRB its intentions to submit a 2023 Recommendation Report in Q2 2024. The NIRB notes that only a general update has been provided to all parties with no information provided on the effectiveness of current measures and recommendations and options provided to reduce the spread and impacts of dust. Further, no dust audit report was submitted to the NIRB in January 2024. ⇒ <i>Baffinland Dust Audit Final Recommendations Report</i> (Nunami Stantec, 2022)
188. Required to work with the TEWG to develop a program for identification of conditions with high risk for dust dispersal and plan for additional mitigation measures that shall be applied at the times the conditions are present.	Active In Compliance	Active Deficient – in Progress	Baffinland continued to develop the program to identify high risk conditions for dust dispersal. The draft program will be reviewed with the QIA and TEWG. Further investigations and trials are planned for 2024 to assess effectiveness of mitigations as well as to further define data collection and incorporating feedback from QIA.
189. Carry out all commitments made on the public record but not recorded in the Project Certificate. Performance of these commitments will be evaluated bi-annually (twice yearly) by an interim Project Monitor appointed on in agreement by Responsible Parties. If a commitment is not carried out, the Proponent is required to provide a detailed written description on why not.	Active In Compliance	Active In Compliance	Two (2) interim status updates were submitted jointly by Baffinland and QIA in March 2023 and September 2023. A third status update was submitted to the NIRB in March 2024. Baffinland noted that there are currently a total of 103 distinct commitments that are tracked on an ongoing basis. Currently, 41 of the commitments are now “Complete” while 61 are “In Progress” and only 1 remains “Not Applicable”. Baffinland and QIA are considered “Compliant” with 101 of the 103 total commitments, with only one assignment of “Non-Compliant” and one assignment of “Not Applicable. Baffinland further noted that Baffinland, QIA, and the Government of Canada have been working together since November

Term & Condition	Compliance Achievement 2022- 2023	Compliance Achievement 2022- 2023	NIRB Comment
			2022 to develop a new role which, if established, would replace the Interim Project Monitor (not yet appointed).