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Qikiqtani Inuit Association

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Serving the communities of
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July 4, 2025

Keith Morrison
Manager, Project Monitoring
Nunavut Impact Review Board

RE: **Comment Request for Baffinland Iron Mines Corporation's Mary River Project, 2024 Annual Monitoring Report**

Dear Mr. Morrison,

The Qikiqtani Inuit Association (QIA) appreciates the opportunity to provide our comments on the Mary River Project ("the Project") 2024 Annual Monitoring Report ("the Report") submitted by Baffinland Iron Mines Corporation (BIMC, "Baffinland," or "The Proponent") to the Nunavut Impact Review Board (NIRB). Please find attached our detailed comments in Appendix A. Comments have been categorized according to the following themes:

1. General (QIA 2024 NIRB GC#X)
2. Dustfall (QIA 2024 NIRB DF#X)
3. Meteorology and Climate (QIA 2024 NIRB MC#X)
4. Water Quality (QIA 2024 NIRB WQ#X)
5. Terrestrial Environment (QIA 2024 NIRB TE#X)
6. Marine and Aquatic Environment (QIA 2024 NIRB MAE#X)
7. Socioeconomic Environment (QIA 2024 NIRB SE#X)
8. Inuit Knowledge, Culture, Land and Resource Use and Inuit Qaujimajatuqangit (QIA 2024 NIRB CRLU/IQ#X)

The goal of the comments we have provided here is to support the Proponent in fulfilling both the spirit and intent of the NIRB Project Certificate and associated Conditions.

Outcome of Review

QIA's comments include multiple requests for increased data collection, analysis, monitoring, refinement of management plans and detailed description of Inuit involvement and use of Inuit Qaujimajatuqangit throughout project management and monitoring. Many of the concerns

identified by QIA have been raised during reviews of previous annual monitoring reports, though the requests have yet to be fulfilled. To QIA these concerns are related to both the adequacy of measuring and mitigating effects as well as Baffinland's compliance with specific Project Certificate (PC) Conditions.

In summary, some of QIA's ongoing concerns (not in order of priority) are regarding:

- Mitigation of Effects on the Aquatic Environment
- Marine Environment Monitoring
- Wildlife Monitoring
- Dustfall and Dustfall Monitoring
- Methodology and Reporting Issues
- Reporting on Use of Inuit Qaujimajatuqangit

QIA is pleased to observe the following improvements and positive changes that took place at the Project in 2024:

- Upgrades of seven culvert stream crossings, with 13 more to come, while cooperating with Fisheries and Oceans Canada's design to overcome culvert installation settling and other issues related to the presence of permafrost and ice lenses;
- Collection and archiving tissue samples from Arctic char in Cockburn Lake for genetic analysis;
- Improved logistical support for biological testing of Project vessel ballast water;
- All 70 ore carrier voyages conducted both exchange and treatment of their ballast water prior to arriving in Milne Port;
- Higher water withdrawal compliance, a continued improvement from 2023 and 2022;
- Continued use of convoys;
- Adherence to ship speed limits and continued increases in compliance in marine mitigation, and
- Adherence to shipping route with no major deviations.

General – Geotechnical and Hydrological Components

From a geotechnical perspective, the review of the annual report identified that the findings of the WRF Geotechnical Inspection Report are supportive of previous concerns regarding the strength parameters selected in the most recent slope stability assessment. At this stage in the WRF, site specific characterization is important to verify design assumptions. In the absence of site-specific characterization, a sensitivity analysis should be completed to ensure that even with variabilities in the waste rock materials, the minimum required Factors of Safety are maintained. Findings from the 2024 geotechnical inspection indicate that there is a risk that Factors of Safety within the WRF are not currently meeting minimum recommended values.

Details related to the scope and timing of the repairs are not included in the annual report and detail for planned and performed monitoring and maintenance was also noted.

From a hydrogeological perspective, the Mary River Project site is not currently monitoring groundwater in the area of the WRF. Surface water monitoring results have shown WRF seepage water to have elevated constituents of potential concern and low pH levels. Groundwater in this area is at an elevated risk of experiencing similar water quality issues and should be routinely monitored.

Mitigation of Effects on the Aquatic Environment

Pilot Studies

Pilot studies conducted by Baffinland to assess risk of harm to Arctic char from compounds released by rubber tire particulates (2022) and impacts of Project-generated dustfall and sediment on the ecology of Tote Road streams (2023, 2024), have met with limited success. Both are important gaps in knowledge of Project-related effects. The results to date should be shared by Baffinland, along with any plans for alternative approaches for related future work.

Elevated Nitrates

In 2023 and 2024 the CREMP found elevated nitrogen-related compounds in Sheardown Lake tributary 9 (SDLT9) and in 2024 elevated nitrate in both Sheardown Lakes (NW and SE). A special

investigation completed in the fall of 2024 identified activities at the Dyno Nobel Emulsion Plant (Dyno facility), which stores ammonium nitrate for explosives production and is adjacent to SLDT9, as the primary source of these compounds. Baffinland plans to implement an activity audit of the transportation, storage, and handling of ammonium nitrate at the Dyno facility, with potential additional water sampling during the open water season in 2025, to help identify point source(s) of aqueous nitrogen compounds. Nitrates can harm fish. The amount of ammonium nitrate required for explosives preparation will triple with the planned increase in ore production to 18 Mtpa. The careful control of and monitoring for fugitive nitrogen compounds should be ongoing for the life of the Project.

Benthic invertebrates

In Sheardown Lake NW the relative proportion of Chironomidae at littoral benthic invertebrate composition (BIC) stations was strongly negatively correlated with sedimentation rate and thickness. These ecological shifts are a concern. Chironomid larvae are important prey for small and large Arctic char in July and August, so a shift in the BIC that reduces chironomid availability could negatively affect juvenile growth, reproduction, and overall survival. The Lake Sediment Monitoring Program is an important tool for understanding factors that influence the BIC and Arctic char in Sheardown Lake NW. It should be continued over the long term to provide early warning of Project-related impacts as the mine increases production. Further monitoring is needed to enable direct comparisons of the chemical components of sediment trap and dustfall trap samples and better understand how they are related. Total organic carbon (TOC) should be added to the suite of analyses to better understand its relationship to relative abundance of chironomids.

Fish Passage

In February 2024, DFO issued a Correction Measure order requiring Baffinland to remediate 20 culverts and support each one with a new sediment and erosion control and environmental monitoring plan. Of these culverts, 7 were removed and rebuilt prior to the spring freshet, 3 of these required further work post-freshet related to settlement or subsurface seepage, and one (CV-216) was identified as a priority for re-construction in 2025, to improve fish passage and re-establish road integrity at the crossing. Between 21 and 24 September, overland flooding from an extreme rainfall damaged 6 culvert crossings, 1 of which was completely washed out. These were repaired in the following weeks. Baffinland is working with DFO to re-evaluate geotechnical work

and engineering for the remaining culvert crossings based on lessons learned from the 2024 construction program. Despite ongoing concern regarding fish passage and delays in culvert crossing remediation, QIA recognizes Baffinland's 2024 culvert replacement and remediation work as a positive development, as is the cooperation between DFO and Baffinland to improve culvert designs.

The timing flexibility of field sampling programs for Arctic char at fish bearing Tote Road stream crossings, and remote Reference sites (e.g., Reference Lake 3), should be increased to facilitate sampling when conditions are optimal for assessing Arctic char access to upstream summering habitat and for characterizing Reference populations. Temporal data should be examined to assess long-term access of younger age class fish to habitats upstream of the culvert crossings.

Arctic char

In 2024 the open water sedimentation rates for all three habitat sampling groups in Sheardown Lake NW were at or near the highest found since sampling began in 2014. There is a clear increasing trend since 2019. The sediment deposition thresholds for Arctic char egg survival currently used in the TARP (Low 0.15, Moderate 0.54, and High 1 mm) have not been validated for the species or for Project-generated sediment. Studies to validate sediment thresholds for Arctic char egg survival should be completed prior to the planned production increase.

Marine Environment Monitoring

Southern Route Sea Ice

In 2023 QIA requested "*Baffinland 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*. Baffinland responded "[n]*o additional studies are anticipated at this time* (2024 Ann. Rep. App. E.1, Cmt. # 107, p. 80). QIA's question was posed after Baffinland's consultants (Vic 2023, 2024) identified important gaps in knowledge of sea ice conditions along the southern route related to ice thickness and quality in Foxe Basin and Steensby Inlet; the presence of pressure ridges, multi-year ice, and icebergs; and the persistence and importance of polynyas. These gaps should be filled well in advance of the first ore shipments via the southern route.

Invasive species risk

In 2024, all of Baffinland's 70 ore carrier voyages conducted both exchange and treatment of their ballast water prior to arriving in Milne Port. QIA recognizes this as a positive development. Biological testing was conducted on a subset of these vessels as part of the risk-based assessment of ballast water conducted by DFO scientists and Inuit trainees, with Baffinland's collaboration and logistical support. This Pilot Project is assessing the efficacy of using exchange and treatment to reduce the number of live biota in ballast water and enable vessels to meet the D-2 standards for ballast water. This is important, as international testing has found many vessels with approved treatment systems are not meeting the D-2 standards under their operating conditions. To reduce invasive species risks, compliance testing of Project vessel ballast water should be ongoing throughout the life of the Project to ensure the D-2 standards are met.

Surveys of Project vessel hulls for biofouling were not conducted in 2024 and Baffinland does not plan to conduct additional surveys outside the MEEMP and NIS/AIS programs (Main Doc., s.4, p. 319). QIA does not support Baffinland's apparent suspension of efforts to conduct meaningful hull fouling surveys and comply with PCC 91. This approach will limit understanding of risk related to hull fouling on Project vessels. This is a concern as hull fouling is an important vector for invasive species (e.g., Gollash 2002; Goldsmit et al. 2021), and Baffinland plans to increase its annual ore shipments from 4.2 Mtpa to 18 Mtpa, with the associated increase in wetted hull area and surfaces prone to biofouling.

Anadromous Arctic char

Anadromous Arctic char that winter in freshwater systems that drain into the Milne Inlet / Eclipse Sound and Steensby Inlet / northeastern Foxe Basin areas can range widely in their respective coastal areas during their summer. While they will intermingle in the sea with char from other rivers in their respective areas, these stocks may also be genetically distinct and require river-by-river management (e.g., Moore et al. 2014). In 2024 Baffinland collected and archived tissue from char in Cockburn Lake for potential genetic analysis. Genetic information from these samples can be used to monitor which stocks are frequenting the port areas, and to inform mitigation and stock management.

Bruce Head program

The Bruce Head study has been conducted for 10 years, including 5 years of Unmanned Aerial Vehicle (UAV)-based behavioural focal follows. Effort has been substantial, but sample size issues remain for many of the models. Non-significant findings, despite large effect sizes, have been attributed to low sample size, high variability, and unbalanced data. The Proponent has recommended some modifications to the analysis approach, and QIA agrees that there is a need to explore alternate analysis methods that may be better suited to the available sample sizes and unbalanced data.

Ship-Based Observer and Marine Mammal Observation Network programs

Project Certificate Conditions that require a vessel-based marine wildlife observer program are not being met with current monitoring programs. The Shipboard Observer (SBO) program has run in some years, but will not occur with reduced shipping levels (4.2 mtpa) and no icebreaker support. The voluntary Marine Mammal Observation Network (MMON) program was introduced in 2020, but vessel participation has been limited and there are significant concerns about the reliability of data collected by untrained observers. Expansion and improvements of the MMON program will also not address Project Certificate requirements for the monitoring of marine birds. NIRB requested an update on how Baffinland intended to expand this program, and the Annual Report provides little detail.

Overflight Monitoring and Compliance

In their responses to QIA's comments on the 2023 TEAMR, Baffinland had indicated that they would provide details of their investigation into the leading causes of non-compliant flights and committed to undertaking mid-season check-ins with pilots who have had non-compliant flights. Based on QIA's review of the 2024 TEAMR, it appears that neither the investigation nor mid-season check-in occurred or Baffinland omitted providing details of either of these. QIA remains seriously concerned by the increasing non-compliant flights, especially as 2024 was the fourth worst year for non-compliant flights with a total of 120.55 hours of non-compliant flight time.

Wildlife Monitoring

QIA continues to be concerned by Baffinland's inaccuracies with respect to reporting mortality incidents related to the Project. In the 2023 NIRB Annual Report, Baffinland indicated there were incidents related to the Project and indicated there were 17 bird mortalities, while in the 2023 TEAMR Baffinland reported more than 20 bird mortalities. Similarly in the 2024 NIRB Annual Report, Baffinland reported 3 bird mortalities, which was less than the 5 bird mortalities noted in the 2024 TEAMR. Baffinland indicated that these mortalities, including one loon, were within FEIS predictions; this statement does not align with the assessment for red-throated loons, which stated that mortality of any individual loon is not expected. QIA continues to request that Baffinland undertake enhanced measures to reduce bird mortalities associated with collisions with buildings, which Baffinland has yet to commit to implementing. QIA continues to request further details of the incidental observations of wildlife, including location, group size, and general behaviours. Baffinland has been unwilling to commit to collecting more information as part of their incidental wildlife observations, which is concerning to QIA as these observations can be useful to inform wildlife monitoring, mitigations, and understanding of wildlife interactions with the Project and Project activities. Baffinland recorded more than 141 caribou as part of incidental wildlife observations, which suggests that caribou numbers are increasing around the Project. Having further details from these observations would help benefit monitoring and mitigation activities. Baffinland has not committed to undertaking further baseline data collection and monitoring of waterfowl along the southern railway corridor and Steensby Port, despite requests from QIA for further monitoring before construction activities commence, and during operation to ensure that potential adverse effects are monitored and mitigated. While Baffinland confirmed they will provide to both QIA and the TEWG 1) the surveillance program to identify the presence of caribou along the railway and 2) operational protocols for trains to avoid collisions with caribou ahead of the start of railway operations, they did not indicate how far in advance they would provide these proposed programs and protocols for review, which is concerning to QIA as reviewing the associated documents and resolving potential issues may require a substantial amount of time.

Dustfall and Dustfall Monitoring

QIA remains concerned by the statistically significant increases relative to baseline and exceedance of a lichen indicator value noted in Baffinland's previous lichen-metal monitoring activities. To date Baffinland has not committed to undertaking more frequent monitoring despite these concerning results from their monitoring program. QIA continues to request that Baffinland

undertake more frequent monitoring at these sites so that timely mitigations can be undertaken, until monitoring shows a reduction in lichen-metal concentrations. To date, Baffinland has provided only limited details of their program for identifying conditions with high risk for dust dispersion and have only noted that they have trials and initiatives underway to identify these conditions. QIA notes that this program is important for ensuring that Baffinland is undertaking proactive measures to reduce dust generation during high risk conditions and continues to request that Baffinland share further details of this program. QIA continues to have concerns with the updated dustfall modelling completed by Baffinland, including a concern with the arbitrary cut-off of the spatial extent of the model's outputs, which limits the utility of the model in comparison to the dustfall monitoring data and FEIS predictions.

Inadequate Reporting on Use of Inuit Qaujimajatuqangit

QIA has reviewed Baffinland's 2024 Annual Report to find that the description of how Inuit Qaujimajatuqangit has informed mitigation and monitoring design, analysis and interpretation of results, as well as conclusions is largely overlooked. While Baffinland's responses to QIA comments provide general statements indicating that Inuit Qaujimajatuqangit was incorporated and that Inuit were engaged at specific meetings and events, there is no information provided on methods used or what changes were made to plans and programs resulting from Inuit Qaujimajatuqangit. There is no way for reviewers to confirm Baffinland's assurances or evaluate Baffinland's work. This is a recurring comment for several years that Baffinland has not addressed.

QIA expects that Baffinland meet the PC conditions for use of Inuit Qaujimajatuqangit. QIA expects Baffinland's Annual Report to describe how Inuit values of stewardship, or respect for wildlife have been incorporated into Project activities and how Inuit observations of change are reflected in the design and interpretation of monitoring results.

Conclusion

QIA would like to state again our appreciation to the NIRB and Baffinland for the opportunity to provide our comments on the 2024 Annual Monitoring Report and on Baffinland's compliance with the NIRB Project Certificate Conditions. We trust the NIRB will hold Baffinland to the highest

standard in meeting the Terms and Conditions of the Project Certificate, including their specific and underlying objectives related to environmental protection, Inuit well-being, and Inuit access to benefits.

QIA remains fully committed to working collaboratively and in good faith with all parties in relation to the Mary River Project.

Nakurmiik,

Jared Ottenhof
Director, Lands and Resource Management
Qikiqtani Inuit Association

Attachment: Appendix A: QIA comments on Baffinland 2024 Annual Monitoring Report

Appendix A: QIA comments on Baffinland 2024 Annual Monitoring Report

General - GC

Comment #	QIA 2024 NIRB GC# 01
References	**Document Name:** Appendix G.2.6.1 – Mary River Project Geotechnical Inspection Report Pt 1. **Section:** 2024 Geotechnical Inspection Recommendations and Implementation Plan **Page:** 2-8
QIA Comment	There are several recommendations made within the Appendix. While BIM has addressed each of the recommendations, very little detail has been included in terms of dates of previous or planned repairs and maintenance.
QIA Request	Please provide available documentation, photographs of proposed and applicable repairs discussed within Appendix C.2, as well as estimated timing of referenced routine maintenance.

Comment #	QIA 2024 NIRB GC# 02
References	**Document Name:** Appendix E.8.2 Baffinland Response to QIA 2024 Environmental Audit **Section:** Attachment 1, Table 1. **Pages: 1**
QIA Comment	The most recent slope stability modelling of the WRF indicates an internal friction angle of 40 degrees was assumed for the waste rock, which is stated to be ‘conservative’. It is unclear if this strength is based on literature review or on-site specific lab testing.
QIA Request	Provide documentation of the lab testing data or literature that supports the material characteristics used in the stability assessment. To better understand risks associated with potential variations in materials, it is recommended sensitivity analyses be completed at lower strengths to verify that minimum recommended Factors of Safety are met.

Comment #	QIA 2024 NIRB GC# 03

References	**Document Name:** Appendix G.2.6.2 Geomechanic and Geotech Inspection of Facilities **Section:** Table 1. **Pages: 1**
QIA Comment	The most recent slope stability modelling of the WRF indicates an internal friction angle of 40 degrees was assumed for the waste rock which is stated to be 'conservative'. The 2024 geotechnical inspection reports an apparent angle of repose of 32 degrees in the WRF lifts. Materials exhibiting an angle of 32 degrees can potentially exhibit internal friction angles below 40 degrees.
QIA Request	Provide documentation of the lab testing data or literature which supports the material characteristics used in the stability assessment. To better understand risks associated with potential variations in materials, it is recommended sensitivity analyses be completed at lower strengths to verify that minimum recommended Factors of Safety are met. The most recent slope stability modelling of the WRF indicates an internal friction angle of 40 degrees was assumed for the waste rock which is stated to be 'conservative'. The 2024 geotechnical inspection reports that the WRF lifts have an apparent angle of repose of 32 degrees. Although this does not directly equate to the internal angle of friction it is an indication that it may be lower than 40 degrees.

Comment #	QIA 2024 NIRB GC# 04
References	**Document Name:** Appendix G.2.6.1 – Mary River Project Geotechnical Inspection Report Pt 2. **Section:** Table C.3.1 **Pages:** 1-2
QIA Comment	Several repairs to the Tote Road are planned for the 2025 season, however, repair plans and schedule are not provided.
QIA Request	Please provide an outline of the recommended repairs outlined in (Tetra Tech, 2024) which are to be completed for each planned repair and a high-level schedule of when they will occur.

Comment #	QIA 2024 NIRB GC# 05
References	**Document Name:** 2024 NIRB Annual Report **Section:** Section 4. Table 4.1.5 **Pages: 121**
QIA Comment	Groundwater quality is not monitored in the WRF area. Seepage from the WRF has been measured to have relatively high concentrations of various constituents of potential concern as well as low pH levels in the past.
QIA Request	Please provide a conceptual model of groundwater flow describing justification for the lack of groundwater monitoring in the area surrounding the WRF.

Comment #	QIA 2024 NIRB GC#6
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** NA **Page:** NA
QIA Comment	In the 2024 Nunavut Water Board Annual Report for Operations Baffinland had indicated that reclamation studies will be provided in the 2024 NIRB Annual Report. Based on QIA's review it does not appear that Baffinland has included the reclamation studies.
QIA Request	QIA requests that Baffinland commit to providing the reclamation studies for their review. QIA may provide further comments related to reclamation research work completed by Baffinland pending this review.

Dustfall (QIA 2024 NIRB DF#X)

Comment #	QIA 2024 NIRB DF#1
References	App G.4.2 Lake Sedimentation Monitoring Report P 10, Figure 2.1
QIA Comment	Baffinland has engaged in "investigation of dustfall on lake sedimentation in Sheardown Lake NW" at the request of the NIRB. While the positioning of the stations appears in line with that objective, it is unclear whether the monitoring stations are sufficient to evaluate the influence of indirect sources of dust to the aquatic environment. We specifically highlight the impact of melting snow stockpiles that are entrained with snow onto Sheardown Lake, and locations proximal to the tributaries.

QIA Request	Please clarify whether the study design is sufficient to evaluate the influence of: • melting dust entrained snow stockpiles proximal to Sheardown Lake onto the lake itself, and • the influence of the Sheardown tributaries. Further, please clarify whether the study design is sufficient to distinguish these influences from dust directly deposited onto the surface of the lake. We recommend Baffinland update the study design to address these concerns if needed.

Comment #	QIA 2024 NIRB DF#2
References	App G.4.2 Lake Sedimentation Monitoring Report, Section 2 Methods, Section 2.4 Data Analysis, Section 2.4.1 Sedimentation Rate and Sediment Accumulation Thickness Estimates
QIA Comment	Baffinland describes how the sedimentation rate was evaluated statistically. While these evaluations include a comparison to the baseline period, sedimentation rates in a reference area or differing dustfall isopleths do not appear to have been considered and would be a valuable addition to the study as part of a “Before/After Control/Impact” or BACI study design.
QIA Request	Please include comparisons to sedimentation rates in the reference lake or in an alternate location within a “nil” dust deposition isopleth following a similar study design to that employed in Sheardown Lake NW.

Comment #	QIA 2024 NIRB DF#3
References	App G.4.2 Lake Sedimentation Monitoring Report Section 2 Methods, Section 2.4 Data Analysis, Section 2.4.1 Sedimentation Rate and Sediment Accumulation Thickness Estimates
QIA Comment	The statistical evaluations of sedimentation rates are intended to determine whether thresholds for low, moderate and high action level responses have been reached based on measured sedimentation rates. These thresholds range from 0.15 mm at the low level to 1mm at the high level. No power analysis has been provided to determine whether the study design and statistical tests are sufficient to evaluate changes of this magnitude with a high degree of confidence.
QIA Request	Please provide a power analysis for the investigation of dustfall on lake sedimentation in Sheardown Lake NW. If power is insufficient to meaningfully detect changes associated with the proposed thresholds, suggest and implement study design changes to address the shortcoming.

Comment #	QIA 2024 NIRB DF#4
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 6-7
QIA Comment	QIA previously requested that Baffinland provide details of their evaluation of the use of DusTreat at the crusher and ore stockpiles (QIA 2023 NIRB DF #6). QIA acknowledges Baffinland's response that the crusher and ore stockpile trials are ongoing, but notes that Baffinland did not provide a timeline for when the trials would be completed or when the results would be shared.
QIA Request	QIA requests that Baffinland provide an update on when the crusher and ore stockpile trials will be completed and when they will share the requested details of the trials for review and comment.

Comment #	QIA 2024 NIRB DF#5
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 8
QIA Comment	QIA previously requested that Baffinland monitor lichen-metal concentrations more frequently than presently scheduled so that if thresholds in the TEMMP are exceeded, timely responses can be undertaken (QIA 2023 NIRB DF #9). Baffinland responded that their prescribed monitoring frequency is 3-5 years, which they have met and that their sampling to date has suggested that lichen metal concentrations present a low risk. QIA recognizes that while many lichen-metal concentrations are below baseline, some show significant increases above baseline values or exceedances above lichen indicator values. Without timely monitoring data Baffinland will be unable to undertake appropriate corrective responses, meaning that potential adverse impacts could persist for longer periods. As well, QIA previously requested a meeting with Baffinland by September 2024 to resolve the outstanding issues with the isopleth modelling that have been on-going since February 2023. Baffinland responded that they would

	discuss this further with QIA and requested that QIA provide a consolidated summary of outstanding comments.
QIA Request	A. QIA requests at a minimum that Baffinland undertake annual monitoring at sites where statistically significant increases in lichen metal concentrations have been detected and/or lichen indicator values have been exceeded, to determine whether additional mitigation measures are warranted in these areas. B. QIA requests that Baffinland commit to undertaking a meeting with QIA to resolve the outstanding comments related to the isopleth modelling within 2 months of receipt of QIA's outstanding comments summary document.

Comment #	QIA 2024 NIRB DF#6
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 10-12
QIA Comment	QIA previously requested that Baffinland provide further details on their program for identifying conditions with high risk for dust dispersion (QIA 2023 NIRB DF #13). Baffinland responded that they noted the requested details and that the requested information is still in development, and they have trials and initiatives underway to get an understanding of the interrelation between environmental factors and mitigation methods. QIA notes that Baffinland did not provide additional details beyond their response that the trials and initiatives are underway. Without these additional details, it is difficult for QIA to provide meaningful input into Baffinland's proposed approach, to ensure that ongoing trials and initiatives will contribute to the forthcoming program for identifying conditions with high risk for dust dispersion.
QIA Request	A. QIA requests that Baffinland provide the following details: • Scope and intent of each of the initiatives and trials; • Data being collected for each of the initiatives and trials related to high-risk conditions for dust dispersion (e.g. wind speeds, time since precipitation event);

	• Methods for collecting the data related to high-risk conditions for dust dispersion; and • Rationale, meteorological data, or literature review that was used to develop the proposed 80 km/h and 60-80 km/h thresholds. B. QIA requests that Baffinland commit to providing updates to QIA as the program for identifying conditions with high risk for dust dispersion is being developed. QIA expects that this will include updates while the program is being developed so that QIA is able to provide input before the program is finalized.

Comment #	QIA 2024 NIRB DF#7
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.2.5 Section 3.1.1 **Page:** p. 6
QIA Comment	Within the Dust Audit Report, Nunami Stantec notes that as part of their blasting review and blast optimization program study that they monitored 7 blasts in 2023/2024 and that the parameters assessed during the blasts included: • “change in blast size; • change in burden, spacing and collar; • change in powder factor; • effect of stemming plugs; • ore versus waste parameters; and • wind direction and strength during blast times.” (p. 6) QIA notes that the list of the parameters assessed by Baffinland will benefit from expansion and that additional parameters should be considered that may impact the amount of dust generation (e.g. time since last precipitation event).

QIA Request	QIA requests that as part of future blast monitoring events for the blasting review and blast optimization program study, Baffinland consider monitoring the following additional parameters: • time since last precipitation event; • relative humidity; and • temperature.

Comment #	QIA 2024 NIRB DF#8
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.2.5 Section 3.2 **Page:** p. 10
QIA Comment	Within the Dust Audit Report, Nunami Stantec notes that Baffinland provided an update on the committee's recommendation on materials handling and stated that with the future development of Steensby Port "the current plan is to enclose crushing and possibly implement other recommended measures at the mine site." (p. 10). No other details are provided on which of the other recommended measures may be implemented at the mine site.
QIA Request	QIA requests that Baffinland provide further details on which of the other recommended measures will be implemented at the mine site in addition to enclosing the crusher.

Comment #	QIA 2024 NIRB DF#9
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Table 7-5 **Page:** p. 7; p. 68-69
QIA Comment	QIA previously requested that Baffinland include comparison of the annual dustfall values to the updated isopleth model and FEIS predictions in the 2024 TEAMR (QIA 2023 NIRB DF #8). Baffinland responded that they would include these comparisons in the 2024 TEAMR, however this comparison appears to be missing in the report.

QIA Request	A. QIA requests that Baffinland provide an updated version of Table 7-5 from the 2024 TEAMR that includes an additional column "EIS Prediction Comparison" noting whether the dustfall data from each station was "Within prediction" or "Above prediction". B. QIA requests that for future TEAMRs Baffinland use the same table format (per above) to report on annual dustfall accumulation at the dustfall monitoring locations.

Comment #	QIA 2024 NIRB DF#10
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.5.1 Section 7.3.1.3 **Page:** p. 57
QIA Comment	Regarding the calculation of annual dustfall based on monitoring data, Baffinland noted that "Any data gaps were filled in using predicted dustfall, calculated as presented in Doetzel and Bajina (2023)." (p. 57). Baffinland does not provide a reference for Doetzel and Bajina 2023 at the end of the TEAMR.
QIA Request	QIA requests that Baffinland provide reference for Doetzel and Bajina 2023, and a copy of the document if it is not publicly available.

Comment #	QIA 2024 NIRB DF#11
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.5.1 Section 7.4.2.3 Map 7-4 **Page:** p. 91
QIA Comment	Baffinland provided Map 7-4 which shows the location of dustfall monitoring locations, extent of estimated dustfall concentrations based on the results of the satellite imagery analysis, and the contour plots showing the predicted low, moderate, and high TSP (total suspended particles) deposition from the updated dustfall modelling. QIA notes that the TSP contour plots in the map appear to be artificially cut off, and do not show their full extent, meaning that it is not impossible to see where the updated dustfall modelling, satellite imagery analysis, and dustfall monitoring station results are in alignment and where there might be discrepancies. As well it appears that not all of the dustfall monitoring locations are included in the map (i.e. DF-RR-02, DF-RR-01). QIA is concerned by these

	limitations to the utility of the map in assessing the potential gaps or alignment of the model with the imagery analysis and dustfall monitoring. In a related previous comment (QIA 2023 NIRB DF#8), QIA had previously requested that Baffinland provide a comparison of dustfall levels from the monitoring stations to the updated dustfall modelling and FEIS predictions. QIA notes that the utility of Map 7-4 could be further improved by having the TSP contour plots from the FEIS dustfall model overlaid as well.
QIA Request	A. QIA requests that Baffinland provide revised Map 7-4 that includes the full extent of the TSP contour plots from the updated dustfall monitoring, full extent of the TSP contour plots from the FEIS dustfall monitoring, and all dustfall monitoring stations (including reference stations). B. QIA requests that Baffinland include as part of future TEAMRs a map that includes the results of the satellite imagery analysis, contour plots from the updated dustfall modelling, contour plots from the FEIS dustfall model, and dustfall monitoring locations.

Comment #	QIA 2024 NIRB DF#12
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board, Appendix E.1 – Response to comments on Baffinland's 2023 Annual Report to the NIRB **Section:** Table A.1, Cmt, # 8 (QIA 2023 NIRB DF#5) **Page**: 5
QIA Comment	Project Certificate Term and Condition (PCC) 21 relates to Groundwater and Surface Waters – Aquatic Effects Monitoring Plan (AEMP) and dustfall monitoring. In its comments on Baffinland's 2023 Annual Report to NIRB related to PCC 21, QIA requested Baffinland provide an update on the results of its Pilot Project to study the effects of Project-generated dust and sediment on the ecology of Tote Road streams (App. E.1, p. 5), and on its plans for work in 2024. In response, Baffinland provided a summary of the 2023 work and its study plans for 2024 and 2025. No summary of progress on this Pilot Project was found in the 2024 Annual Report to NIRB.
QIA Request	QIA requests Baffinland provide an update on the results of its Pilot Project and plans for the 2025 study of Project-generated dust and sediment effects on the ecology of Tote Road streams.

Meteorology and Climate (QIA 2024 NIRB MC#X)

Comment #	QIA 2024 NIRB MC#1
References	2024 NIRB Annual Report, Baffinland Iron Mines, 2024 Annual Report to the Nunavut Impact Review Board. May 30, 2025. Project Certificate Term and Condition No. 17, P. 125-132
QIA Comment	Baffinland stated that "*as a result of an unprecedented rain event in September 2024, several sections of the Tote Road and culvert crossings were damaged and repairs completed. Of particular note, emergency re-construction was completed at Tote Road kilometers 63.5 and 64 due to the wash-out of the road at these locations."* (P. 123). The unprecedented rain event was identified as a 1 in 1000-year storm event. Given that climate change is expected to exacerbate extreme weather conditions, extreme precipitation events may become more frequent at the Baffinland site and may result in increased frequency of washouts necessitating emergency road/infrastructure repairs. Although Baffinland has stated that its monitoring plans and adaptive management framework have been developed to "*identify and manage environmental impacts that are being observed and may be influenced climate change*" (Comment 17, Appendix E.1), it was unclear if Baffinland had implemented storm response/Erosion and Sediment Control measures into their emergency (spill) response plan in place to prevent significant disturbances such as those experienced in September 2024 from happening again.
QIA Request	Please clarify whether adequate consideration has been given for implementing extreme weather event response plans into the emergency response plan. This would include specific erosion and sediment control guidance for managing increased volumes of surface runoff, and more targeted monitoring following repairs, to ensure that mitigation measures or remedies are successful.

Water Quality (QIA 2024 NIRB WQ#X)

Comment #	QIA 2024 NIRB WQ#1
References	2024 NIRB Annual Report, Baffinland Iron Mines, 2024 Annual Report to the Nunavut Impact Review Board. May 30, 2025. Project Certificate Term and Condition No. 17, P. 125-132
QIA Comment	Baffinland stated that the KM 105 pond design "*has not performed as expected*" (P. 128) evidenced by ongoing seepage from the pond, and following comprehensive evaluation of the pond's performance (and an extensive grout curtain project to remedy seepage from the pond, which was unsuccessful); Baffinland committed to improving sediment and erosion control measures to manage surface water flowing from valley infrastructure. Baffinland stated that a water filtration and polishing system had been installed at the KM 105 pond (which was not fully commissioned in 2024), and effluent from the polishing pond was to flow through an engineered structure. Baffinland stated that "*some of these features are planned to be installed at the end of year following completion of engineering*" (P. 131). It was unclear if the water filtration/polishing system was in place at the end of 2024 and would be operational in 2025. Additionally, Baffinland mentioned that a Construction Summary Report would include details of these activities, however, it remains unclear when this report would be issued.
QIA Request	Please clarify when the water filtration/polishing system will be fully commissioned at the KM 105 pond, and how effectiveness/success of this method will be measured. Baffinland should also provide a copy of the Construction Summary Report to QIA, when available.

Comment #	QIA 2024 NIRB WQ#2
References	2024 NIRB Annual Report, Baffinland Iron Mines, 2024 Annual Report to the Nunavut Impact Review Board. May 30, 2025.
QIA Comment	At the MS-11 location, it was noted that "*the collected water has found its way bypassing the liner at the main dam (north pond) and seeped toward downstream beneath the spillway. It is understood that the potential location of the leak is still under investigation and steps will be made to rectify the situation and bring the pond back into service*." (P. 153). Further, "*minor surface erosion on hazardous waste berms and shifting embankments at the MS-11 surface water pond have been observed in multiple inspections. Culvert failures due to poor soil subgrades persist.*"

	Baffinland committed to conducting more monitoring and implementing mitigation efforts, however, it was unclear what mitigation measures had been proposed.
QIA Request	Please clarify what mitigative measures have been proposed/implemented at the MS-11 surface water pond to address erosion on the hazardous waste berms.

Comment #	QIA 2024 NIRB WQ#3
References	WSP (2025). 2024 Groundwater Monitoring Report. Baffinland Iron Mines Corporation. May 21, 2025.
QIA Comment	It was previously identified that monitoring wells installed in 2022 and 2023 were improperly installed (i.e., without a bentonite cap) (Comment 23, QIA 2023 NIRB WQ #5, Appendix E.11), which made them vulnerable to surface influences, and therefore were not representative of in-situ groundwater conditions, in addition to QA/QC concerns in 2023. In 2024, an attempt was made to install 12-14 new monitoring wells in August 2024, however, the installation was unsuccessful due to thawed ground conditions (P. 28). In the 2024 monitoring program, Baffinland addressed the well limitations by modifying sampling methodologies, including purging groundwater wells (3 well casing volumes) collecting samples only when field parameters had stabilized, and adhering to strict QA/QC protocols (i.e., proper field blank collection), which was reasonable given the program limitations. WSP recommended that new groundwater monitoring wells be installed in "*strategic locations across the site*" (P. 46), and to remediate the existing (incorrectly installed) standpipe wells by excavating around the well "*to a depth of approximately 1 m and constructing a post-installation bentonite seal around the well*." The locations of the planned new well installations were unknown. Uncertainties remain regarding the representativeness of the data collected from the existing standpipe wells, particularly water level data, due to surface water runoff and precipitation influences (as acknowledged by WSP).
QIA Request	Please provide a map indicating where new groundwater monitoring wells will be located, including depth and purpose of each well. Clear well installation records should be provided in the 2025 annual report, to ensure proper installation and to ensure that wells are installed in native material (as some 2022 wells were installed in reworked material, which was not commented on in this report). Existing well records should also be provided, to determine which standpipes were previously installed in reworked material/test pits, which may impact interpretations.

	Please provide the planned timeline for installing the new wells. Given that the August 2024 attempt was unsuccessful, QIA recommends re-installing (and remediating the existing wells) once ground is frozen. QIA also recommends the submission of a well inspection and replacement plan, as many wells on the site are frozen/damaged (given the challenges of maintaining wells in permafrost conditions), to ensure that a robust program with sufficient wells remains operational downgradient of project infrastructure (i.e., the Landfill Facility and Hazardous Waste Berm).

Comment #	QIA 2024 NIRB WQ#4
References	WSP (2025). 2024 Groundwater Monitoring Report. Baffinland Iron Mines Corporation. May 21, 2025.
QIA Comment	There is no groundwater monitoring conducted downgradient of the Hazardous Waste Berm (HWB) to assess potential contaminant transport towards Camp Lake. The only downgradient well (MS-HWB-GWB) was reported to be dry in 2024, and may have been dry/frozen since installation (P. 44). This is of particular concern, since exceedances of chloride, fluoride, nitrate, nitrite, pyrene, dissolved copper, dissolved cobalt, naphthalene, and petroleum hydrocarbons (fraction F2) occurred in source area groundwater and groundwater from proximal well locations (HWB-KP22-05, HWB-KP23-03). WSP recommended in the annual groundwater report that downgradient wells be installed in 2025. It was unclear if Baffinland had committed to installing downgradient HWB wells. Further, WSP stated that "*concerns have been previously raised about a potential liner leak in the northwest sector of the HWB (Baffinland, 2023); as a result, this sector is currently not being used to further dispose of waste*" (P. 12). No further information was encountered regarding this liner leak. Given that there is no downgradient groundwater monitoring, weaknesses in the HWB liner presents a downgradient concern that may have existed for several years that has not been evaluated.
QIA Request	QIA recommends the installation of downgradient wells at the HWB and maintaining these wells to ensure that a complete monitoring network exists. A map showing the proposed monitoring well locations should also be provided. Please provide further information on the presence of a liner leak on the northwest side of the HWB, when the liner leak was discovered, and what short

	and long-term mitigation measures have been proposed (besides no longer storing waste in this area).

Comment #	QIA 2024 NIRB WQ#5
References	WSP (2025). 2024 Groundwater Monitoring Report. Baffinland Iron Mines Corporation. May 21, 2025.
QIA Comment	WSP stated that "*data collected before 2023 was excluded [from the historical groundwater data quality review] due to inconsistencies and potential surface water influence*" (P. 3), and "*groundwater sampling is not consistent throughout the years and low-flow sampling may not be the suitable and the correct Standard Operation Procedure for standpipe wells*" (P. 18), and that large variations in analytical results occurred in pre-2023 groundwater data (P. 43). It appears that there is no reliable groundwater data for the site prior to 2023, and 2023 and 2024 data, while qualified in the annual reporting, is still vulnerable to surface water influences. Therefore, groundwater level data over the site's monitoring history is also considered unreliable. WSP/Baffinland also acknowledge that damaged/dry wells was an ongoing challenge, which has resulted in inconsistent monitoring over the years and difficulties comparing results and analyzing trends.
QIA Request	Please clarify whether any reliable groundwater quality data exists at the Mary River Project (prior to 2023) and provide further information as to why problems with the groundwater monitoring network were not identified earlier. Further, please outline strategies for evaluating project impacts/effects at sites over time without reliable historical groundwater data, and implement them as part of the data evaluation in the 2025 annual report.

Comment #	QIA 2024 NIRB WQ#6
References	WSP (2025). 2024 Groundwater Monitoring Report. Baffinland Iron Mines Corporation. May 21, 2025.
QIA Comment	In 2023, Knights Piesold recommended that a well be installed inside the landfill, to evaluate leachate composition. This was not recommended in WSP's 2024 report. Although several 'source' wells exist in the northwest corner of the LF (i.e., LF-KP23-13, seep monitoring locations), no wells are installed within Cell 1-3 to characterize leachate.

	Further, a sufficient groundwater quality baseline does not appear to exist for the site; WSP stated that "*without a strong groundwater quality baseline, it is difficult to characterise whether groundwater is considered leachate or not*" (P. 19), and therefore groundwater daylighting at the surface was classified as seepage and not leachate. The Landfill Facility has a background monitoring well (LF-KP23-06), and the HWB has 2 background wells (MS-HWB-GW-REF1, HWB-KP22-01) for detecting downgradient project effects, however, a baseline dataset for detecting effects over time was not included/addressed. Baffinland had previously stated that no groundwater had been collected prior to 2017, and that "*historically across the mining industry, groundwater is not a constituent of concern in high arctic permafrost environments*" (Comment 25, Appendix E.1). Given that WSP stated that there was no reliable groundwater data for the site prior to 2023, it was unclear whether Baffinland had established a plan for addressing weaknesses in baseline data collection (i.e., by establishing a regional reference dataset for groundwater)
QIA Request	Please clarify whether a plan exists for establishing baseline data (for detecting effects over time), such as by establishing a regional reference dataset, and whether a groundwater well will be installed in the landfill footprint to evaluate leachate composition, as recommended in 2023.

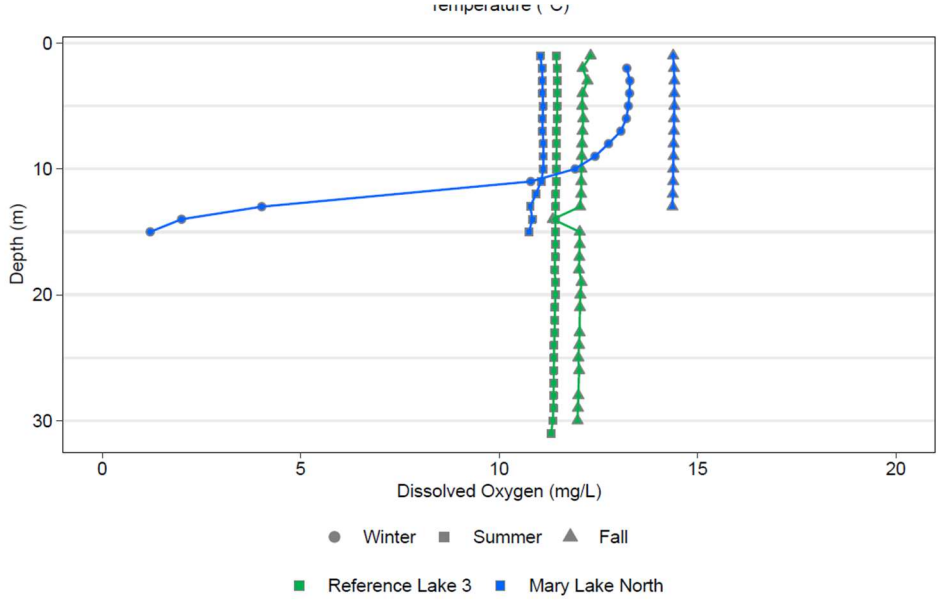
Comment #	QIA 2024 NIRB WQ#7
References	WSP (2025). 2024 Groundwater Monitoring Report. Baffinland Iron Mines Corporation. May 21, 2025.
QIA Comment	Dissolved uranium exceedances were reported at surface water monitoring station MS-MRY-13C on the shore of Sheardown Lake (downgradient of the Landfill Facility), and at groundwater station LS-KP22-01 (a source well at the west extent of the LF) (P. 135). WSP stated that it was possible that "*naturally high uranium concentrations are present at the Project Area*" (P. 44), however, given that dissolved uranium concentrations did not exceed guidelines at the background well (LF-KP23-06), it does not appear that there is sufficient information to conclude that the exceedance is due to background conditions.
QIA Request	Baffinland should clarify whether there was any other background groundwater quality data that could substantiate the claim that dissolved uranium exceedances at and downgradient of the LF were due to background conditions.

Comment #	QIA 2024 NIRB WQ#8

References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report, Appendix G.4.1 Mary River CREMP **Section:** 3.3.1.2 Water Chemistry; 3.3.1.2 Water Chemistry; 4.1.1.2 Water Chemistry; 4.3.1.2 Water Chemistry; 4.4.1.2 Water Chemistry; 4.5.1.2 **Page:** throughout
QIA Comment	Elevated total and dissolved uranium concentrations due to the influence of the mine are ubiquitous across the site. Observations have included: • Elevated concentrations compared to reference streams and baseline conditions across all seasons at the CLT1 Upper Main Stem. • Elevated dissolved uranium concentrations in Campe Lake in summer compared to Reference Lake 3. • Concentrations of total uranium have been elevated relative to Reference Lake 3 since 2015 and relative to baseline since 2017, with a defined increase in concentration from 2017 to 2022. • Elevated concentrations compared to reference streams and baseline conditions in the spring at SDLT12. • Significant increasing trends in total and dissolved uranium concentrations in all seasons combined and in almost all individual seasons since the baseline period (2005 to 2024) and over the mine operational period (2015 to 2024) at both SDLT1 sampling stations. • Elevated concentrations of total and dissolved uranium across all seasons compared to Reference Lake 3 and baseline concentrations in 2024 at Sheardown Lake NW. • A significant increasing trend for total and dissolved uranium at all Sheardown Lake NW water quality stations since the baseline period (2007 to 2013) and over the mine operation period (2015 to 2023). The rate of increase greater since 2022. • Nearly uranium concentrations measured in Sheardown Lake NW were in the dissolved form. • Concentrations of uranium in Sheardown Lake SE were elevated compared to Reference Lake 3 and baseline concentrations. • Significant increasing trends were identified for total and dissolved uranium at Sheardown Lake SE stations over the mine operation period (2015 to 2023; all stations), since the construction period (2014 to 2023; Stations DL0-02-7 and DL-02-8), and since baseline (2007 to 2023; Stations DL0-02-3 and DL0-02-4; Minnow 2024a). • Nearly uranium concentrations measured in Sheardown Lake SE were in the dissolved form which suggests potential for biological uptake and toxicity. Baffinland states, “*Development of an AEMP benchmark for uranium will be considered to support evaluation of the potential biological effects of observed*

	concentrations. The development of this benchmark may include review of baseline and reference concentrations as well as review of potential toxicological effects relevant to the aquatic biota present near the mine site." Given the large number of basins impacted by elevated concentrations of total and dissolved uranium, the increasing trends in concentrations, and the high proportion of dissolved uranium it is imperative that uranium be considered a parameter of concern and an AEMP benchmark be developed to ensure proper adaptive management measures are under taken and Valued ecosystem components are protected.
QIA Request	QIA requests that Baffinland develop an AEMP benchmark for dissolved and total uranium.

Comment #	QIA 2024 NIRB WQ#9
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report, Appendix G.4.1 Mary River CREMP **Section: 5.3.1.1 In *Situ* Water Quality** **Page: 286 of 339**
QIA Comment	When discussing in situ water quality parameters, Baffinland did not discuss the low dissolved oxygen concentrations measured at BL0-01-A (1.21 mg/L) during the winter sampling conducted on April 10, 2024. Dissolved oxygen concentrations this low have ecological consequences and should be reported on, discussed in the text of the report and an evaluation of whether the mine influenced dissolved oxygen concentration in Mary Lake under ice should be completed.

	 **Figure 5.4: Average In Situ Water Quality with Depth from Surface at Mary Lake North Compared to Reference Lake 3 (REF3) during Spring, Summer, and Fall Sampling Events, Mary River Project CREMP, 2024**
QIA Request	QIA requests Baffinland discuss under-ice dissolved oxygen concentrations when concentrations are ecologically relevant in the text of the report and evaluate if the mine has had an impact on water quality and resulted in an ecological effect.

Comment #	QIA 2024 NIRB WQ#10
References	**Document Name:** Mary River Project – Lake Sedimentation Monitoring 2023/2024, Appendix G.4.2 Lake Sedimentation Monitoring Rpt **Section:** 4 Conclusions **Page:** 43 of 119
QIA Comment	Baffinland suggests that dust fall is not the main source of sediment to Sheardown Lake NW because they did not identify any positive temporal correlations between dust fall and sediment-based comparisons between cumulative dust fall deposition rates and sedimentation rates and sediment accumulation thickness estimates. However, Baffinland goes on to describe the similarities between the chemical composition of dust fall and sediment collected for the sedimentation report. The chemical similarities between dust

	fall and sediment suggest dust is a large component of recently accumulated sediment.
QIA Request	QIA requests Baffinland incorporate all lines of evidence to determine the source of sediment to Sheardown Lake NW. This evaluation should include accumulation of sediment as well as sediment chemistry, and consider the melting of dust entrained snow and discharges from tributaries as sources

Comment #	QIA 2024 NIRB WQ#11
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 3 Camp Lake System – 3.1.4.1 Benthic Invertebrate Community North Branch (CLT1-US) **Pages**: 94 - 95 of 339
QIA Comment	The report describes that Chironomidae were the only taxon to show a consistent significant and ecologically meaningful decline across multiple mine operations years (i.e., 2015 to 2017, 2021, 2023, 2024) relative to the 2007 baseline (proportions of Chironomidae on the high end of natural variability). It is unclear how the high variability observed during the 2007 baseline year influences the interpretation of mine related impacts at this site.
QIA Request	Can Baffinland clarify how the consistent decline in Chironomidae relative to the 2007 baseline is interpreted within the weight-of-evidence framework? How will differences in habitat characteristics between reference and mine exposed sites be addressed in future assessments, and how might this influence conclusions about potential mine-related impacts?

Comment #	QIA 2024 NIRB WQ#12
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 3 Camp Lake System – 3.1.4.2 Benthic Invertebrate Community Upper Main Stem (CLT1-L2) **Pages**: 94 - 95 of 339
QIA Comment	The report indicates that a number of Benthic Invertebrate Community endpoints at CLT1-L2 were statistically different from the reference creek and do not appear to be linked to habitat differences between the two areas or mine related influences. Given the mixed and inconsistent temporal patterns observed, it is recommended that Baffinland consider options to better distinguish mine related impacts from habitat variability.
QIA Request	Has Baffinland considered what additional monitoring or analytical approaches are available to more definitively distinguish mine-related impacts from natural

	environmental variability in this system? This may include establishing a reference site with comparable habitat characteristics.

Comment #	QIA 2024 NIRB WQ#13
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 3 Camp Lake System – 3.3.5.1 Fish Community – Littoral/Profundal Arctic Charr **Pages**: 148 - 151 of 339
QIA Comment	Baffinland reports that Arctic Charr in Camp Lake are significantly longer (up to 33%) and heavier (up to 142%) than those in Reference Lake 3, with consistently higher condition factors (e.g., +20% in 2024). It is also noted that Arctic Charr in Camp Lake are now significantly larger and heavier than during the baseline period. While no negative health effects have been documented, mine-associated increases in lake productivity (e.g., elevated nutrients, algal growth, and benthic invertebrate densities) may be enhancing growth conditions for Arctic Charr.
QIA Request	Could the consistently greater size and improved condition of Arctic Charr in Camp Lake since the start of mine operations be attributed to mine related influences on lake productivity (e.g., nutrient enrichment), even if not considered adverse?

Comment #	QIA 2024 NIRB WQ#14
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.2.3 Benthic Invertebrate Community **Pages**: 178 - 180 of 339
QIA Comment	The 2024 Benthic Invertebrate Community at SDLT1 showed statistically significant and ecologically meaningful shifts in community structure compared to both reference and baseline conditions. These changes include increased abundance of pollution tolerant taxa and suggest a less diverse and less functionally balanced benthic community. We understand that Baffinland has implemented a Low Action Response under the AEMP Management Response Framework as a result.
QIA Request	Has the cumulative influence of KM 105 Pond water management and associated water quality changes (e.g., elevated nutrients, substrate embeddedness) been evaluated in terms of long-term mine related impacts on

	aquatic ecosystem function at SDLT1? If not, QIA recommends doing so as part of the 2025 annual reporting.

Comment #	QIA 2024 NIRB WQ#15
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.2.4 Benthic Invertebrate Community **Pages**: 178 - 180 of 339
QIA Comment	Baffinland notes that high nitrogen concentrations from the Dyno facility may promote algal blooms, which can lead to oxygen depletion or habitat alteration. In 2024, algae was noted at SDLT9 in higher concentrations than the reference area.
QIA Request	Has or will algal growth be monitored at SDLT9 over time to assess potential linkages between nutrient enrichment and shifts in the benthic invertebrate community? If temporal trends in nutrient concentrations and algal growth are evident, how are they being integrated into the interpretation of benthic invertebrate responses at SDLT9?

Comment #	QIA 2024 NIRB WQ#16
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.4.4 Benthic Invertebrate Community **Pages**: 209 - 215 of 339
QIA Comment	The 2024 BIC results from Sheardown Lake NW showed that total density in littoral habitats was significantly and ecologically higher than the reference lake and exceeded the Critical Effect Size for the Benthic Invertebrate Community (CESBIC) study threshold. The report also identifies increased numbers of Ostracoda (a disturbance-tolerant taxa) and decreased metal sensitive Chironomidae. In addition, the Lake Sedimentation Monitoring Program (2023–2024) detected higher sedimentation rates and accumulation thicknesses at littoral BIC stations near sediment traps. It appears that sedimentation from mine related disturbances is influencing the benthic invertebrate community structure. The report states, "*Shifts in the BIC correlated with sedimentation rate and accumulation thickness will continue to be investigated through the Lake Sedimentation Monitoring Program in 2025 to assess for potential mine-related influences*."

QIA Request	How will the Lake Sedimentation Monitoring Program be integrated with the long-term biological monitoring to distinguish between natural variability and mine related sedimentation impacts, especially in areas where correlations between sedimentation and benthic invertebrate community shifts are consistent over time?

Comment #	QIA 2024 NIRB WQ#17
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.4.5 Fish Population **Pages**: 215 - 219 of 339
QIA Comment	The report states, "*Gill netting CPUE [catch per unit effort], representing the density of larger, littoral/profundal fish was lower in Sheardown Lake NW in 2024 compared to Reference Lake 3, despite higher chlorophyll-a concentrations and higher benthic invertebrate density in profundal areas*." The report notes that the recent decline in larger Arctic Charr is not considered ecologically meaningful, this trend raises concern given that it occurs alongside indicators of increased lake productivity (e.g. higher chlorophyll-a and higher benthic invertebrate density).
QIA Request	Please clarify the relationship between increased productivity and lower density on larger Arctic Charr? Could this suggest the influence of unaccounted for mine related impacts? Further, as per comment #85 from the 2023 NIRB review, has the weight-of-evidence approach been applied to this specific observation to assess potential mine related impacts?

Comment #	QIA 2024 NIRB WQ#18
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.4.5.2 Fish Health Assessment **Pages**: 219 – 223 of 339
QIA Comment	The report states that the condition of non-YOY Arctic Charr in 2024 was 16% lower than baseline, and this exceeded the critical effect size criterion (CESC ±10%), making it ecologically meaningful. While this has not yet been observed every year, the recurring pattern of lower condition compared to baseline is evident, with 2023 being the only year (recently) without a notable difference.

	We recognize that individual year-to-year differences may not always meet statistical thresholds for mine related impacts. However, consistent trends in key biological indicators, such as repeated declines in fish condition, should not be ignored. These may represent early warning signs of chronic or sub-lethal stress that could become more pronounced over time.
QIA Request	Has Baffinland undertaken an investigation into the potential drivers of the repeated declines in condition of non-YOY Arctic Charr (e.g., changes in habitat quality, food availability, thermal or oxygen stress, or contaminant exposure)?

Comment #	QIA 2024 NIRB WQ#19
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.4.5.2 Fish Health Assessment **Pages**: 219 – 223 of 339
QIA Comment	The report indicates that fewer than 10 YOY Arctic Charr were captured in Sheardown Lake NW in 2024, which is notably lower than in the reference lake. While sample sizes can vary annually, this low catch rate may point to potential issues with recruitment, spawning success, or early life stage survival.
QIA Request	Can Baffinland provide a discussion of potential contributing factors to the low YOY catch in Sheardown Lake NW, including consideration of habitat quality, spawning substrate conditions, water quality, temperature, and potential mine related influences?

Comment #	QIA 2024 NIRB WQ#20
References	**Document Name:** Mary River Project 2024 Core Receiving Environment Monitoring Program Report Part 1 of 3 **Section:** 4 Sheardown Lake System – 4.4.5.2 Fish Health Assessment **Pages**: 223 – 225 of 339
QIA Comment	The Littoral/Profundal Arctic Charr from Sheardown Lake NW were significantly larger and heavier than those from the reference lake in 2024. Condition was also significantly better (by 18%), and this difference exceeded the Critical Effect Size Criterion of ±10%, making it ecologically meaningful, even though in a positive direction. The report attributes this to a higher lake productivity including higher chlorophyll-a and higher benthic invertebrate density. While this change is currently interpreted as non-adverse, consistent trends of increased fish size and condition relative to both reference and baseline

	conditions may reflect nutrient enrichment linked to mine activities. Such enrichment can alter ecosystem structure and function, even in the absence of direct negative effects.
QIA Request	Has Baffinland evaluated the extent to which nutrient loading from mine related activities may be contributing to enhanced productivity and fish growth in Sheardown Lake NW? Is this trend being tracked as a potential early signal of nutrient driven ecosystem changes?

Comment #	QIA 2024 NIRB WQ#21
References	**Document Name:** Mary River Project 2024 Lake Sedimentation Monitoring 2023/2024 **Section:** 2.4.3 Benthic Invertebrate Community **Pages**: 23 – 24 of 119
QIA Comment	The analysis includes comparisons of BIC endpoints across various stations in Sheardown Lake NW, with correlations drawn to sedimentation rates. However, it is unclear if there is a reference or control site, unaffected by mining related activities, included in the analysis.
QIA Request	QIA recommends Baffinland clarify whether a reference site was established as part of the study design. If not, can Baffinland comment on how baseline or background conditions are accounted for in the interpretation of observed patterns?

Comment #	QIA 2024 NIRB WQ#22
References	**Document Name:** Mary River Project 2024 Lake Sedimentation Monitoring 2023/2024 **Section:** 3.4.1 Littoral Zone **Pages**: 35 – 38 of 119
QIA Comment	Baffinland states, "*However, the relative proportion of Chironomidae at the littoral BIC stations (DL0-01-4 and DL0-01-9) was significantly and strongly negatively correlated with both sedimentation rate and accumulation thickness estimates*." As sedimentation rate and accumulation increased, the relative proportion of Chironomidae at the littoral stations (DL0-01-4 and DL0-01-9) decreased, and this relationship was both statistically significant and strong. This suggests that higher sedimentation is negatively impacting the chironomid population in the

	shallow nearshore zones of the lake, which could have implications for Arctic Charr that rely on them for food, particularly during early life stages.
QIA Request	Given the importance of chironomids as a primary food source for juvenile Arctic Charr, how is this decline being interpreted in terms of potential early ecological effects related to sedimentation?

Comment #	QIA 2024 NIRB WQ#23
References	**Document Name:** Mary River Project 2024 Lake Sedimentation Monitoring 2023/2024 **Section:** 3.4.2 Profundal Zone **Pages**: 38 – 42 of 119
QIA Comment	The results of the benthic invertebrate sampling in the profundal zone found, "*Overall, sedimentation rates and accumulation thickness estimates appear to influence the BIC in Sheardown Lake NW's profundal habitat to some extent, with arctic charr likely relying on these food sources (i.e., chironomids and FFGs) during later life stages and at various points throughout the open water season. Although no adverse effects on arctic charr health have been observed* *in annual monitoring, the observed relationships between BIC and sedimentation (rate and accumulation estimates) suggested that continued monitoring of potential sedimentation effects to both BIC and arctic charr is crucial*." It is important to note that the 2024 gill net CPUE for Arctic Charr was lower than the three previous years and the reference lake. While this value remains within historical range it may indicate an early sign of change that will need to be monitored for emerging trends. The TARP tables reference a weight of evidence approach. As noted, the TARP is designed to identify statistically significant exceedances of low thresholds that may not trigger ecologically meaningful concerns when assessed on their own. However, multiple lines of evidence are now showing potential impacts. QIA has a growing concern about cumulative effects, especially at higher trophic levels where stressors such as degraded water quality (direct exposure), benthic invertebrate changes (food supply), and habitat alterations may interact to affect fish health.
QIA Request	Can Baffinland clarify the minimum effect size that could meaningfully impact Arctic Charr condition factor, and the power of the existing study design to detect that effect size?

Comment #	QIA 2024 NIRB WQ#24
References	**Document Name:** Mary River Project 2024 Lake Sedimentation Monitoring 2023/2024 **Section:** 3.4.2 Profundal Zone **Pages**: 38 – 42 of 119
QIA Comment	The report states, "*Although sedimentation appears to influence BIC in the areas examined in this report, arctic charr are not sedentary and can access preferred food sources in other parts of the lake, including Sheardown Lake southeast (SE), which is connected to Sheardown Lake NW. Additionally, a more comprehensive annual analysis of the entire lake's BIC community and arctic charr populations/health is conducted through the CREMP, which to date has shown no consistent, adverse mine-related effects. However, ongoing monitoring of the relationship between BIC, sedimentation rates, and accumulation thickness estimates will be essential for providing valuable insights, ensuring timely detection of potential effects, and supporting mitigation measures if any issues arise*." While Arctic Charr are mobile, and may avoid impacted areas, this doesn't eliminate localized impacts or habitat loss in key foraging zones like the littoral areas of Sheardown Lake NW. The statement that Arctic Charr are not sedentary and can access preferred food sources in other parts of the lake, appears to downplay the importance of potential localized habitat impacts from mine related activities. While Arctic Charr mobility may allow them to move from degraded areas, this does not remove the ecological importance of those habitats.
QIA Request	Can Baffinland detail how the potential for habitat loss or decreased quality is being considered into a cumulative effects assessment, especially when multiple lines of evidence indicate early warning signs?

Comment #	QIA 2024 NIRB WQ#25
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Document) **Section:** 4.6.5 Groundwater & Surface Water, PCC 20 - Explosives **Page**: 123 (pdf p. 141 of 641)

	Document Name: Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board, Appendix G.4.1 (Part 1 of 3) Core Receiving Environment Monitoring Report (CREMP) **Section:** Executive Summary **Pages**: iii (pdf p. 5 of 339) **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board, Appendix G.4.1 (Part 2 of 3) Core Receiving Environment Monitoring Report (CREMP) **Section:** Appendix C, Figure C.11 **Pages**: pdf p. 136 of 358 **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board, Appendix G.4.1 (Part 3 of 3) Core receiving Environment Monitoring Report (CREMP) **Section:** Appendix I Sheardown Lake tributary 9 (SLDT9) aqueous nitrogen compounds special investigation **Page**: I-3 (pdf p. 272 of 276) **Document Name:** Baffinland Iron Mines 2023 Annual Report to the Nunavut Impact Review Board, Appendix G.4.1 (Part 1 of 3) Core receiving Environment Monitoring Report (CREMP) **Section:** 6 Conclusions, Table 6.1 **Pages**: 269 (pdf p. 291 of 307)
QIA Comment	The objective of Project Certificate Term and Condition (PCC) 20 is "*To ensure that the effects associated with the manufacturing, storage, transportation and use of explosives do not negatively impact the areas surrounding the Project.*" (Main Doc., p. 123) In 2023 (CREMP 2023, p. 269) and again in 2024 (CREMP 2024, p. iii) the CREMP found elevated nitrogen-related compounds (ammonia, nitrate, nitrite, and total Kjeldahl nitrogen) in Sheardown Lake tributary 9 (SDLT9), and in 2024 elevated nitrate in both Sheardown Lakes (Northwest [NW] and Southeast [SE]) (App. G.4.1, Figure C.11, pdf p. 291). A special investigation completed in the fall of 2024 identified activities at the Dyno Nobel Emulsion Plant (Dyno facility), which stores ammonium nitrate for explosives production and is adjacent to SLDT9, as the primary source of these compounds (CREMP 2024 App. I, p. I-3 (p. 272 of 276)).

	Baffinland plans to implement an activity audit of the transportation, storage, and handling of ammonium nitrate at the Dyno facility, with potential additional water sampling during the open water season in 2025, to help identify point source(s) of aqueous nitrogen compounds. The amount of ammonium nitrate used for blasting at the mine will increase significantly with the planned increase in ore production from 4.2 to 18 Mtpa. How might this affect the nitrogen inputs to the aquatic receiving environments?
QIA Request	QIA requests that Baffinland clarify how the planned increase in ore production may affect the transportation, storage, and handling of ammonium nitrate in relation to aquatic receiving environments.

Terrestrial Ecology (QIA 2024 NIRB TE#X)

Comment #	QIA 2024 NIRB TE#2
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 41
QIA Comment	QIA previously requested that Baffinland share the results of the caribou fecal pellet programs and associated reporting (QIA 2023 NIRB TE #10). Baffinland responded that there was no relevant information to the project effects that could be gained from an analysis of the 2020 fecal pellets. Baffinland did not provide any information as to why an analysis of the 2020 pellets would not provide relevant data on the project effects, which is concerning to QIA as where possible it would be beneficial to learn more about caribou on North Baffin especially as it relates to the Project.
QIA Request	QIA requests Baffinland provide more details on the 2020 sampling, including an explanation as to why no relevant data on project effects are able to be gained from an analysis of the 2020 fecal pellets.

Comment #	QIA 2024 NIRB TE#3
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Section 9.6

	Page: p. 42; p. 160-161
QIA Comment	QIA previously noted concern with an apparent erroneous observation of a piping plover in 2023 (QIA NIRB TE #13). Baffinland noted that the observation was unlikely to be a piping plover and noted that they would try to be as accurate as possible with incidental observations in the future. In Section 9.6 of the TEAMR, Baffinland notes that a common merganser (*Mergus merganser*) was observed in 2024. QIA notes that this likely a mis-identification and that it's more likely the observation was of a red-breasted merganser (*Mergus serrator*) which breeds on Baffin Island, while common merganser does not.
QIA Request	QIA requests that Baffinland continue to undertake a thorough review of incidental observations made on site to ensure that accounts of species observations in future TEAMRs are accurate.

Comment #	QIA 2024 NIRB TE#4
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Section 9.6 **Page:** p. 42-43; p. 160-161
QIA Comment	QIA previously requested that Baffinland provide mapping of incidental caribou observations and details on group sizes from incidental observations in 2023 and future reports (QIA 2023 NIRB TE #14). Baffinland responded that either the 2023 aerial survey or other surveys specific to caribou should be reviewed and provided no further details regarding the incidental observations. While Baffinland provided a high-level overview of the incidental observations in Section 9.6, they did not include further details about group sizes and only provided very general locations (e.g. Tote Road, exploration areas southeast of the Project). QIA maintains that incidental observations have benefits in contributing to an understanding of caribou use of the areas around the Project and potential caribou-Project interactions, especially as it appears that caribou numbers are beginning to increase around the Project. Having more details of incidental observations, including the location, group size, and general behaviours, would be beneficial as these data could help inform monitoring and mitigations for the Project.
QIA Request	QIA continues to request that Baffinland provide locations of incidental observations (precise where available or approximate locations such as X km on the Tote Road), details of group sizes, and general behaviours of the

	individuals from incidental observations, and a map showing the locations of incidental observations.

Comment #	QIA 2024 NIRB TE#5
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 43-44
QIA Comment	QIA previously noted concerns with the potential project related effects on birds from the construction and operation of the southern railway and Steensby Port and requested that Baffinland undertake further monitoring islet nesting areas, cliff nesting raptors, peregrines, and waterfowl (QIA 2023 NIRB TE #15). QIA acknowledges Baffinland's response that they will undertake islet nesting surveys before southern commercial shipping occurs but remains concerned by Baffinland's lack of commitment for undertaking roadside/railside waterfowl surveys. The construction and operation of the southern railways and Steensby port may produce different effects on waterfowl relative to the Tote Road and Milne Port and should be monitored. Without suitable characterization of current baseline conditions and monitoring adverse effects may occur and continue unmitigated.
QIA Request	QIA requests that Baffinland undertake roadside/railside waterfowl surveys around the Mine site, southern railway route, and Steensby Port to help understand current conditions and potential Project effects once construction and operations of the southern railway and Steensby Port commence. This will help to ensure potential adverse effects are monitored and appropriately mitigated.

Comment #	QIA 2024 NIRB TE#6
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E

	Page: p. 45
QIA Comment	QIA previously requested that Baffinland provide details of the planned timing of the development of the surveillance program to identify the presence of caribou along the railway and operational protocols for trains to avoid collisions with caribou relative to the start of railway operations (QIA 2023 NIRB TE #18). Baffinland responded by saying they would provide the surveillance program and operational protocols for QIA and the TEWG to review in advance of the start of railway operations, but provided no timeline on when it would be shared. QIA is concerned that if the surveillance program and operational protocols are not provided at least 2 years in advance of railway operations, there will not be sufficient time to review, provide comments, and resolve outstanding issues between QIA/TEWG and Baffinland.
QIA Request	QIA requests that Baffinland commit to providing the surveillance program and operational protocols to QIA and the TEWG at least 2 years in advance of the start of railway operations.

Comment #	QIA 2024 NIRB TE#7
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; **Page:** p. 45-46
QIA Comment	QIA previously requested that Baffinland undertake work to develop baseline information and associated indices for wolf presence/abundance, particularly along the southern railway corridor and Steensby Port area (QIA 2023 NIRB TE #19). Baffinland responded that they will develop baseline information along the southern railway corridor and Steensby Port. QIA notes that no timelines for collecting this baseline information were noted by Baffinland in their response and there was no specific confirmation that this baseline information would include the requested information on wolf presence/abundance.
QIA Request	A. QIA requests that Baffinland confirm how far in advance of construction of the railway Baffinland plans to undertake these baseline studies. B. QIA requests that Baffinland confirm that the baseline studies will include the requested wolf occurrence information.

Comment #	QIA 2024 NIRB TE#8
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 46
QIA Comment	QIA requested that Baffinland provide details of the methods for their proposed ARU deployment targeting Red Knots for review and comment in advance of the program initiation (QIA 2023 NIRB TE #20). QIA acknowledges Baffinland's response that they will be bringing this forward to the TEWG. However, in their response Baffinland provided none of the requested details of the planned program. This is a concern for QIA because without these details, it is not possible for QIA to assess whether it will be effective.
QIA Request	A. QIA requests that Baffinland provide the minimum expectations of the program (see below) two weeks in advance of the TEWG meeting in which the program will be discussed. B. QIA requests that Baffinland provide the following details for the ARU program: ○ The number of ARUs that will be deployed; ○ Length of deployment of the ARUs; ○ ARU deployment timing; ○ Location the ARUs will be deployed and how they were selected; and ○ Proposed data analysis approach.

Comment #	QIA 2024 NIRB TE#9
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Section 9.4.1-9.4.2 **Page:** p. 48-49; p. 140-141
QIA Comment	QIA previously requested Baffinland implement their suggested measures to minimize field of view obstructions due to snow, ice, or fog, and if unable to implement the suggested measures, to provide an explicit rationale for not implementing the specific measure for the remote cameras (QIA 2023 NIRB TE #22). QIA notes that Baffinland responded that they will evaluate and report on the viability of using anti-moisture packs or anti-fog products on the remote cameras, but this evaluation was not included in the 2024 TEAMR. This is a

	concern for QIA, as without this information it is not clear whether attempts to implement these measures occurred. QIA previously requested that Baffinland report on the number of times remote cameras were checked, including the dates they were checked, if they require servicing, and if so what type of servicing was required. QIA acknowledges that Baffinland included the dates that the cameras were checked in Appendix G.5.1 Section 9.4.1 (December 2023 and June 2024). However, the details regarding the servicing were not reported on in the 2024 TEAMR.
QIA Request	A. QIA requests that Baffinland report on their evaluation of the viability of using anti-moisture packs or anti-fog products on the remote camera as part of a TEWG meeting in 2025. B. QIA requests that Baffinland provide details on the servicing of each remote camera along with the dates they were checked in future TEAMRs.

Comment #	QIA 2024 NIRB TE#10
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E **Page:** p. 50-51
QIA Comment	QIA previously requested that Baffinland conduct a literature review regarding wildlife road crossings and the thresholds at which behaviours like paralleling and deflecting from roads may have significant impacts on individuals and local populations (QIA 2023 NIRB TE#24). Baffinland requested further details of the purpose of these associated thresholds. By having thresholds for behaviours like paralleling and deflecting from roads/railways that are based on existing literature, the results of future snow track surveys would be able to be compared to these, and if the threshold is exceeded appropriate mitigations could be undertaken. Identifying these thresholds will be especially important for caribou.
QIA Request	QIA requests that Baffinland conduct a literature review regarding wildlife road crossings and the thresholds at which behaviours like paralleling and deflecting from roads may have significant impacts on individuals and local populations. The results of this literature review should be reported back to the TEWG and used to interpret the snow tracking survey data in future TEAMRs.

Comment #	QIA 2024 NIRB TE#11
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board

	Section: Appendix E **Page:** p. 51-52
QIA Comment	QIA previously noted concern regarding the lack of reporting associated with the wildlife scans / wildlife clearance survey before blasting activities occurred, and requested that Baffinland provide a summary of wildlife scans / wildlife clearance surveys completed before blasting activities (QIA 2023 NIRB TE #25). While QIA acknowledges that Baffinland stated in their response that they have in place a caribou observation form that is completed before blasting activities, Baffinland did not provide a summary of wildlife scan / wildlife clearance surveys were provided in the 2024 TEAMR.
QIA Request	QIA requests that Baffinland provide an annual summary of the wildlife scans / wildlife clearance surveys completed before blasting activities as part of future TEAMRs. QIA expects that this summary will include the date and time of the surveys, location, details of any wildlife observations, and details of mitigations employed if wildlife was observed.

Comment #	QIA 2024 NIRB TE#12
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Section 5 **Page:** p. 37-38; p. 20-39
QIA Comment	Due to concerns regarding the impacts of non-compliant flights on moulting snow geese and wildlife, QIA previously requested that Baffinland (QIA 2023 NIRB TE #3): ● provide details of their proposed investigation methods to assess leading causes of non-compliant flights; ● provide the results of the investigation, and; ● undertake a mid-moulting season assessment of pilot compliance and have discussions with pilots if they have any non-compliant flights. Baffinland responded that they would provide details of their investigation methods, that the results of the investigation would be discussed in the 2024 TEAMR, and that they would complete mid-moulting season assessments of pilots and discussion with pilots regarding non-compliant flights. QIA is concerned by the lack of follow through by Baffinland. In the 2024 TEAMR, Baffinland does not include any details of the investigation methods to assess leading causes of non-compliant flights, or the results of the investigation. As well, Baffinland provides no indication in the 2024 TEAMR that Baffinland completed mid-moulting season assessments / discussions with pilots. QIA notes that 2024 appears to be the fourth worst year for non-compliant flights with 120.55 hours of non-compliant flights (p. 38). QIA remains

	concerned that Baffinland's corrective actions to reduce non-compliant flights are lacking and is disappointed Baffinland has not provided the requested details despite indicating that they would.
QIA Request	QIA continues to request that Baffinland: ● Provide the proposed investigation methods for review by the TEWG, to ensure that the investigation will identify the root causes of non-compliance; ● Provide the results of their investigation, and corrective actions they will undertake to determine why their mitigation protocol was not being followed correctly and how they can prevent this from occurring in the future; and ● Commit to completing mid-moulting season assessment of pilot compliance and discussions with any pilots that have breached compliance of the 2021 mitigation protocol. QIA expects that this would include a record of the mid-moulting season assessment and dates/times of the discussions with pilots that had non-compliant flights.

Comment #	QIA 2024 NIRB TE#13
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Section 5.2.1 **Page:** p. 38; p. 27-31
QIA Comment	QIA requested that Baffinland provide mapping of the helicopter flights routes relative to walrus locations in future annual reports (QIA 2023 NIRB TE #4). Baffinland responded by agreeing to provide this in future reporting, but no walrus haulout locations are included in the helicopter flight route maps found in Appendix G.5.1, Section 5.2.1 of the 2024 Report. This is a concern to QIA as the potential disturbance from flights could lead to adverse effects to walrus and because Baffinand had indicated they would provide this mapping in future reports, but appeared to not have done so.
QIA Request	QIA requests that Baffinland provide mapping of the 2024 helicopter routes relative to walrus haulout locations and to provide this mapping as part of future reports.

Comment #	QIA 2024 NIRB TE#14
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Summary, Table 0 and Section 9.2 **Page:** p.39; p.xix; p. 130-134

QIA Comment	As part of the 2023 NIRB Annual report review, QIA requested that Baffinland provide further details of the landscape and safety limitations for snowbank height management that led to compliance levels of 88% in 2023, including mapping showing locations of non-compliance (QIA 2023 NIRB TE #6). In their response Baffinland did not provide a map showing the locations of the non-compliant snowbanks. In the 2024 TEAMR, compliance levels for snowbank height show a further decrease (91% in 2022, 88% in 2023, and 86% in 2024). QIA is concerned by this trend as reduced compliance levels could impact important wildlife crossings for caribou and cause deflections from the Tote Road. As well, Baffinland did not provide a map showing the locations of the non-compliant snowbanks, which could help in understanding if there are locations with chronic non-compliance.
QIA Request	QIA continues to request that Baffinland provide a map showing the locations of non-compliant snow banks, and the locations of important wildlife crossings that intersect the Tote Road.

Comment #	QIA 2024 NIRB TE#15
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Table 4:23; Appendix E; Appendix G.5.1 Section 11.5 **Page:** p. 242-243; p.40; p.172-174 **Document Name:** Baffinland Iron Mines 2012 Mary River Project Final Environmental Impact Statement Volume 6 Terrestrial Environment **Section:** Section 4.8 **Page:** pp. 108-111
QIA Comment	QIA previously requested that Baffinland provide details of existing mitigations to prevent bird collisions on buildings / infrastructure and options for enhanced mitigations to present collisions (QIA 2023 NIRB TE #8). Baffinland responded that mitigations for effects on birds are provided in the TEMMP and that additional mitigations in accordance with the TEMMP may be considered. QIA is concerned that Baffinland did not provide any enhanced mitigations beyond those in the TEMMP that could be used to avoid bird mortalities associated with collisions on buildings / infrastructure. The additional five bird mortalities due to apparent collisions on buildings / infrastructure in 2024 add to this on-going concern (1 loon, 2 ptarmigan, 1 snow bunting, and 1 unknown songbird).

	As well, within Table 4:23 Baffinland states that "Three (3) bird mortalities were observed, but this is within FEIS predictions" (p. 243). This appears to contradict the FEIS which notes that "Direct mortality of any individual loons due to Project activities is not expected…" (p. 110). QIA is concerned by Baffinland's inaccurate reporting of FEIS predictions.
QIA Request	A. QIA requests that Baffinland provide further details of the five bird mortalities associated with collisions on buildings / infrastructure noted in the 2024 TEAMR, and provide further details of bird mortalities, especially for those not within FEIS predictions, in future reporting. B. QIA requests that Baffinland install suitable mitigations for windows (e.g. American Bird Conservancy Bird Tape) to reduce possible window strikes associated with buildings. C. QIA requests that as part of future TEAMRs that Baffinland provide a map showing the location of bird mortalities that are assumed to be associated with collisions on buildings / infrastructure. This will assist in understanding whether there are buildings / infrastructure that may be causing bird mortalities year after year. D. QIA requests that Baffinland update the statement in Table 4:23 to state that the bird mortalities were not within FEIS predictions.

Comment #	QIA 2024 NIRB TE#16
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix E; Appendix G.5.1 Section 11.5; Table 4:23 **Page:** p.41; p.172-174; p. 242-243
QIA Comment	QIA noted that the total bird mortalities reported in Section 11 (Appendix G.5.1 of the 2023 Report) did not match the total reported in Figure 11-1, and requested that Baffinland revise section 11 or Figure 11-1 to ensure this reflects the correct number of mortalities from collisions with buildings / infrastructure (QIA 2023 NIRB TE #9). Baffinland responded that Figure 11-1 will be updated to reflect Project-related mortalities. QIA notes that the numbers for 2023 have not been updated in Figure 11-1 of the 2024 TEAMR (Appendix G.5.1), and currently shows more than 20 mortalities from collisions with buildings / infrastructure. This is concerning, as it remains unclear what the true number of mortalities in 2023 were, and if the true number is over 20, the details of the mortalities should be provided. In addition to the above on-going concern, the 2024 TEAMR and NIRB Annual

	Report appear to have discrepancies related to the number of bird mortality events as well. Specifically, in Table 4:23 of the 2024 NIRB Annual Report, Baffinland notes that there were 3 bird mortality events which were associated with collisions with buildings/infrastructure (1 loon and 2 ptarmigan). However in Section 11 of the 2024 TEAMR, Baffinland identifies 5 bird mortalities, including 1 loon, 2 ptarmigan, 1 snow bunting, and 1 unknown songbird associated with collisions with buildings / infrastructure. As well, Figure 11-1 in the 2024 TEAMR does not show any mortalities associated with collisions with buildings / infrastructure. QIA continues to be concerned with Baffinland's inaccuracies related to reporting bird mortalities associated with the Mary River Project.
QIA Request	A. QIA requests Baffinland provide further details of those 2023 mortalities, including species, date of mortality event, location of mortality event, and assumed cause of mortality. B. QIA requests that Baffinland provide in their response to this comment an updated version of Figure 11-1 that accurately shows the number of bird mortalities and associated cause for both 2023 and 2024, and update this figure in the 2024 TEAMR

Comment #	QIA 2024 NIRB TE#17
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.5.1 Section 2.2; Appendix C.2 **Page:** p. 4; p. 133-134
QIA Comment	Baffinland states that as part of TEWG meeting #32 they shared two desktop studies (wildlife monitoring option and definitions of caribou deflection) and that no comments were received back from TEWG members. QIA did share comments on the definitions of caribou deflections and this is reflected in Appendix C.2.
QIA Request	QIA requests that Baffinland updating the wording in Section 2.2 to reflect that while comments were not provided in time for TEWG meeting #32 that they were provided in advance of the #33 TEWG meeting.

Comment #	QIA 2024 NIRB TE#18
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.5.1 Section 9.7 and Section 9.6 **Page:** p. 161-165

QIA Comment	Baffinland notes as part of their caribou Tote Road observations that in 2024 environmental staff were notified of near-project observations of caribou and completed follow-up behavioral monitoring. Baffinland notes that “Fifty-one caribou incidental observations during 22 monitoring events were recorded along the Tote Road in 2024.” (p. 163), while earlier on in the report regarding incidental observations they noted that “In total, 97 caribou were seen across 34 observations from the Tote Road between May 21 and August 16, 2024.” (p. 161). QIA is concerned by the discrepancy in these numbers as they appear to be quite different. Baffinland notes that as part of these observation environmental staff record: ● location description; ● survey start and end times; ● number of individuals; ● sex of individuals; and ● behavioural responses. Baffinland provided a very high level overview of their results of the caribou Tote Road observations including timing of observations by month, distance ranges, and general behaviors. QIA recommends having further details provided of the caribou Tote Road observations so that potential trends between years can be assessed and a more indepth understanding of the potential Project-caribou interactions are provided.
QIA Request	A. QIA requests that Baffinland include as part of their reporting if any of the caribou behaviour observed required vehicles on the Tote Road to stop per the caribou decision framework (i.e. major migration, present on the road, within 100m and moving towards the road). B. QIA requests that Baffinland provide a table summarizing the caribou observations in 2024 and as part of future TEAMRs that includes the following information: ○ date; ○ location description; ○ survey start and end times; ○ number of individuals; ○ sex of individuals; ○ behavioural responses; and ○ whether caribou behaviour required vehicles on the Tote Road to stop. C. QIA requests that Baffinland provide a map showing the caribou observations in 2024 and as part of future TEAMRs.

	D. QIA requests that Baffinland provide an explanation regarding the discrepancy in caribou observations and number of individuals seen in 2024 between Section 9.7 and 9.6.

Comment #	QIA 2024 NIRB TE#19
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** Appendix G.5.1 Section 11 **Page:** p. 172
QIA Comment	Baffinland notes that 10 wildlife mortalities occurred in 2024, including one mortality that "...was a result of incidental catch while completing other surveys." (p. 172). Baffinland does not provide further details as to how the mortality incident occurred, which is concerning to QIA as it is unclear if this kind of event could have mitigations in place to prevent it from occurring in the future.
QIA Request	QIA requests that Baffinland provide further details the mortality even caused by incidental catch including: ● type of survey; ● species involved in the incident; and ● description of how the mortality incident occurred.

Marine and Aquatic Environment (QIA 2024 NIRB MAE#X)

Comment #	QIA 2024 NIRB MAE#1
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (main report) **Section:** s. 4.3, s. 4.6.9, s. 4.6.11 **Pages**: 43-44, 242-264, 332-425 **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board App. E.1 - Response to Comments **Section:** Table A.1: Response to QIA Comments on Baffinland's 2023 Annual Report to the NIRB **Pages**: 59-60 **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board App. G.6.3 - Incidental Marine Mammal Sightings **Section:** full document

	Pages: full document (1 page) **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board App. G.6.7 MMON Summary **Section:** full document **Pages**: full document (2 pages)
QIA Comment	Numerous Project Certificate Term and Conditions outline the requirements and expectations for a vessel-based marine wildlife observer program (s. 4.6.11, PCCs 103, 106, 107, 108, 121, 122, and 123) (as noted in previous Annual Report reviews). Baffinland ran a Shipboard Observer (SBO) program in some years and introduced the Marine Mammal Observation Network (MMON) program in 2020, when the coronavirus pandemic precluded running the SBO program on board icebreaking vessels. The MMON is a voluntary marine mammal incidental sightings program that in 2024 included participation of seven vessels (all ore carriers, see for example s. 4.6.11, p. 360, PCC 103), which is a reduction in participation from 2023. In 2024 these 7 vessels reported 4 sightings, for a total of 15 individual marine mammals, in the Regional Study Area (RSA) (Table 4.28, s. 4.6.11, p. 361). There was no SBO program on board the *MSV Botnica* or *MSV Fennica* in 2024, as no ice management was required in the shoulder seasons. QIA disagrees with the Proponent with respect to compliance (e.g., s. 4.3, pp. 43-44, Main Report) on Terms and Conditions related to the Shipboard Observer (SBO) program, as these conditions were not met in 2024 and will not be met again in 2025. Issues with the Proponent's monitoring programs were identified by QIA and the NIRB in their reviews of the 2023 Annual Report, and these concerns were not sufficiently addressed. Reporting for 2024 also provides contradictory information on the Proponent's plans for 2025. For example, under PCC 105 (s. 4.6.11, p. 365), Baffinland states it "*will place Marine Wildlife Observers (MWOs) on icebreaking vessels during the fall shoulder season when icebreaking operations are required*". However, reporting for PCC 106 (s. 4.6.11, pp. 372) indicates that no icebreaking will be required with a return to shipping levels of 4.2 mtpa. With no icebreaking, there will be no SBO program with trained observers, despite it being a requirement in the Project Certificate under multiple Terms and Conditions. Baffinland is planning to continue with the incidental marine mammal sightings program in collaboration with MMON, and has noted a need to expand the

	program (s. 4.6.11, p. 361). This program could provide useful information to inform monitoring, mitigation, and adaptive management. However, based on 2024 reporting, the reliability of these data is questionable, as it was in 2023. Table 4.29 (s. 4.6.11, p. 361) indicates that one sighting of three Harbour Porpoises was reported in September 2024 (in southern Milne Inlet). There are no confirmed records of this species in the Eclipse Sound region, and this observation is highly suspect, as were the reported observations of Grey Seals in 2023 (see QIA comments on 2023 Annual Report to NIRB). Baffinland expects species identification and data recording to improve as the program continues (App. E.1 - Response to Comments, p. 59), but consistently reliable and accurate data are needed to meet Project Certificate requirements and support effective monitoring and adaptive management now. There are also discrepancies between what is reported in the Annual Report main document and Appendix G.6.3 (Incidental Marine Mammal Sightings) and the MMON data summarized in Appendix G.6.7 (MMON Summary). This issue was also identified last year and has not been fully resolved. The main report (e.g., Table 4:29, p. 361) indicates that four marine mammal species were recorded by MMON vessels in the RSA (one observation each of Narwhal, Ringed Seal, Harp Seal, and Harbour Porpoise). A number of RSA marine mammal sightings reported in the MMON summary in Appendix G.6.7 are not included in the main report text. The MMON summary in Appendix G.6.7 also provides a link (navigatingwhales.ca) where one can view the data. QIA filtered the data to show all observations in the RSA associated with Baffinland (i.e., linked to Baffinland as the partner) that occurred between July 1 and October 31, 2024. This search identifies sightings of unidentified seals, Ringed Seals, Killer Whales, and Harp Seals. These records do not match what is reported in the Annual Report and in Appendix G.6.3, which leads to concerns over the accuracy and reliability of the MMON program itself and the Proponent's reporting on the program. The MMON network provides observations of marine mammals only (and of questionable reliability, as noted), but similar Project Certificate Terms and Conditions also apply to marine birds. For example, PCC 73 (s. 4.6.9, p. 256) requires "*detailed and robust mitigation and monitoring plans for migratory birds*" (also see PCC 68, 69, and 74). At present, there are no Proponent-led monitoring programs for marine birds. The Proponent is supporting Environment and Climate Change Canada (ECCC) and their university partners on Thick-Billed Murre research at Cape Graham Moore (see for example Table 4:23, p. 242-243), and while this program will provide useful results, it is not a substitute for the robust monitoring plans expected under

	PCC 74, which identifies Common and King Eiders and seabird migration and wintering as key indicators for follow up monitoring. No 2024 monitoring for these indicators is included in the Annual Report. Project Certificate Conditions 107 and 108 (s. 4.6.11, pp. 373-376) also speak to a need for the Proponent to monitor seabird or seaduck responses to shipping traffic. Reporting on these two conditions makes no mention of seabird or seaducks. This was identified in QIA comments on the 2023 Annual Report but remains unaddressed. In NIRB's 2024 Annual Monitoring Report, the Board requested an update be included in this annual report on how the Proponent intends to expand this program. The Proponent's response (s. 4.6.11, p. 372, PCC 106; p. 415, PCC 123) refers to the MMON network's marine mammal incidental sighting program and states that the objectives of the relevant Terms and Conditions (e.g., PCCs 103, 106, and 123) can be met with this program. QIA disagrees, for all the reasons identified above. The program would need to be expanded significantly to meet marine mammal observer requirements in the Project Certificate. Even if the MMON were to be significantly scaled up, there would still be issues with data reliability and reporting discrepancies, and the program also does not address the Project Certificate requirements for monitoring of marine birds. These issues have all been raised in previous years, without sufficient resolution by the Proponent.
QIA Request	QIA requests that Baffinland: 1. address the inconsistencies between the various documents (Annual Report main text and appendices) for the MMON results in both 2023 and 2024, and ensure greater care in future reporting to provide consistent and accurate reporting. 2. report on opportunities to both increase participation in the MMON network and, more importantly, provide training to operators to increase observer reliability. 3. establish a program that meets Project Certificate Terms and Condition requirements for marine bird monitoring. This should also include compiling, analyzing, and reporting on marine bird observations collected using the ECSAS standardized protocol during previous SBO program deployments. These data should be analyzed to determine habitat use, areas and timing of interaction with Project activities, and behavioural responses to vessels. In responses to 2023 Annual Report comments (Appendix E.1), the Proponent noted that a summary of eider species observations since the beginning of the SBO program would be added in future reports. However, there will be no SBO program, as currently

	structured, without icebreaking support. These data and analyses should be provided in a standalone summary report. 4. provide an update (as requested by NIRB in 2024) on how it intends to expand the observer program to address Project Certificate Terms and Conditions for marine wildlife including birds.

Comment #	QIA 2024 NIRB MAE#2
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (main report) **Section:** 4.6.11 **Pages**: 332-425 **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board App G.6.4 (in three parts on Registry) - 2024 Bruce Head Shore-based Monitoring Program **Section:** entire report **Pages**: entire report
QIA Comment	Results of the Bruce Head program are summarized in updates of several Project Certificate Conditions in s. 4.6.11 (e.g., PCC 101, 110, 111) and described in greater detail in App. G.6.4. The Bruce Head study has been conducted annually since 2014 (with the exception of 2018), and there are now 10 years of data, including 5 years of Unmanned Aerial Vehicle (UAV)-based behavioural focal follows. Despite these extensive efforts, sample size issues remain for many of the models. For example (summary of results reported in App. G.6.4), models of vessel proximity effects on primary behaviour, unique behaviours, and presence of nursing behaviour were all not statistically significant despite large effect sizes at close proximity to vessels. These non-significant findings, despite large effect sizes, have been attributed to low sample size, high variability, and unbalanced data. That sample sizes are still low, despite five years of UAV data, suggests a need to consider alternative statistical approaches and models that may be better suited to the available sample sizes and unbalanced data. Appendix G.6.4 recommends (s. 8.0, p. 158) modifications to the analysis approach with data no longer analyzed by group type and instead using a model that accounts for presence of immature narwhal in groups. QIA agrees that there is a need to explore alternate analysis methods.

	Continued efforts to increase focal follows are also important, although limitation exist. UAV-based focal follow survey effort was dependent on weather conditions and external factors such as helicopter traffic and local hunting activity (App. G.6.4, s. 5.6, p. 84). Additional early warning indicator (EWI) (group composition) data was also collected for narwhal in the Behavioural Study Area (BSA) using dedicated UAV surveys starting in 2024 (App. G.6.4, s. 4.2.3, p. 30). Did this increase in effort to collect EWI data take any focus away from behavioural data? Behavioural response data should be prioritized. Behavioural response data analyses in recent years include only UAV-data, and not the behavioural response data collected via shore-based monitoring in the BSA from 2014 to 2021. Is this correct? What statistical approaches are available that could use all of the behavioural response data that has been collected to date? There is some uncertainty regarding the filtering of data on days in which killer whales were present. On p. 41, s. 4.3.1.7 (App. G.6.4) it states that killer whales were present on six days in the combined 2014–2024 dataset, including once in 2024 (on 26 August). These cases were all removed from the dataset. However, p. 153 (s. 5.7.1), notes that killer whales were observed on two occasions during the 2024 study period, on 26 August 2024 and 3 September 2024. Was only one of the two days removed, and if so, why?
QIA Request	QIA requests that Baffinland: 1. explore alternative statistical approaches for analysis of Bruce Head data for discussion with the Marine Environmental Working Group. This should include options for modelling approaches that use UAV and shore-based behavioural data. 2. continue to explore ways to increase UAV-based focal follow effort, recognizing the limitations that exist. 3. prioritize behavioural focal follows over UAV-based EWI surveys. 4. clarify why 3 September 2024 was not filtered from analysis if killer whales were known to be present.

Comment #	QIA 2024 NIRB MAE#3
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (main report) **Section:** s. 4.6.10, s. 4.8.1 **Pages:** 327-329, 560-562

	Document Name: Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board App C.1 - MEWG Meeting Records **Section:** MEWG Meeting Records for June 5, 2024 **Pages:** 13-18 (pdf file pages 93-98 of 175)
QIA Comment	At the 05 June 2025 meeting of the Marine Environmental Working Group (MEWG), Baffinland provided an update on the supplemental spill modelling that it would undertake for the Southern Shipping Route through Hudson Strait and Foxe Basin into Steensby Inlet (App. C.1, pdf file pp. 93-98). After the introductory presentation, it was noted that Baffinland would be conducting further engagements on this topic with Baffin Island communities and HTOs, and Makivvik Corporation. In the Annual Report summary for PCC 97 (s. 4.6.10, p. 327-329), Baffinland notes that this supplemental spill modelling commenced in 2024 and is ongoing, and that "[a]*dditional details regarding the proposed modelling locations will be shared with communities located in proximity to the Southern Shipping Route in mid-2025*". The revised spill modelling is anticipated to be complete by the end of 2025. No additional information on this topic has been provided to MEWG members since mid-2024. It is now mid-2025, and the assessment is anticipated to be completed within 6 months. What efforts have been made to solicit community information and consult on model locations since the June 2024 MEWG meeting? Reporting for PCC 176 (s. 4.8.1, p. 560-562) states that the spill modelling "covers the areas of Steensby Port, Foxe Basin, Mill Island and Mid-Hudson Strait", for spill scenarios in winter (February), open water (August), ice break-up (July) and freeze-up (October). These statements suggest decisions have been made on model sites, which contradicts the earlier statements in PCC 97. Additional clarity of project status is requested, along with an update on current spill modelling progress and consultations.
QIA Request	QIA requests that Baffinland provide additional clarification on the status of the supplemental spill modelling for the Southern Shipping Route, including updates on consultations that have occurred with communities on proposed modelling locations, and on how MEWG feedback from June 2024 has been factored into the modelling effort.

Comment #	QIA 2024 NIRB MAE#4
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Document) **Section:** 4.6.4 Hydrology and Hydrogeology, PCC 16 Water Infrastructure **Pages**: 103-106 (pdf p. 122 to 124 of 64) **Section:** 4.6.4 Hydrology and Hydrogeology, PCC 19 Water Infrastructure Monitoring **Pages**: 116-119 (pdf. P. 134- 137 of 641) **Section:** 4.6.7 Freshwater Environment, PCC 45 General **Pages**: 177-179. (pdf p. 195-297 of 641) **Section:** 4.6.7 Freshwater Environment, PCC 47 Watercourses **Pages**: 182-183 (pdf p. 200-201 of 641) **Document Name:** Baffinland Iron Mines 2023 Annual Report to QIA and NWB for Operations [NWB Registry: 240331 - 2023 QIA-NWB Annual Report for Ops - Main Body - As Sent.pdf] **Section**: 7.3.8 **Page:** 36 (62 of 90) **Document Name:** Baffinland Iron Mines 2024 Annual Report to QIA and NWB on Operations Main Document [NWB Registry: 250331 2024 QIA-NWB 2024 Type 'A' Annual Report for Operations, Main Body- As Sent] **Section:** 2.4 **Pages**: 17 (pdf p. 36 of 94)
QIA Comment	"*On January 19, 2024, DFO issued a Letter of Advice (LOA) 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 (DFO, 2024).*" (BIM 2023 QIA NWB ARO, s.7.3.8, p. 36). "*In parallel with the issuance of the LOA, DFO issued a new Correcti*[ve] *Measure*[s] *Order on February 5, 2024 requiring all 20 previously identified culverts to be remediated and to be supported by new sediment and erosion control and environmental monitoring plans*." (Main Doc. 2024, s.2.4, p. 17). In 2024, seven (7) culverts identified in the DFO LOA were remediated. Progress on this work is summarized in relation to hydrology (PCCs 16 and 19) and fish passage (PCC 45 and 47) in the Annual Report to NIRB (Main doc.). The Corrective Measures Order is also pertinent to these PCCs and covers

	another thirteen (13) culverts that require remediation. Neither the Order nor the culverts were mentioned in the Annual Report Main Doc. summaries for PCCs 19, 45, and 47.
QIA Request	QIA requests that Baffinland provide updates to the Annual Report summaries for PCCs 19, 45, and 47 on the status of culverts identified in the DFO Corrective Measures Order that still require remediation, and on progress in 2024 toward completing that work.

Comment #	QIA 2024 NIRB MAE#5
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Document) **Section:** 4.6.10, PCC 88 Marine Environment - Ballast Water **Pages**: 309ff (pdf p. 327 to 329) SEM (Sikumiut Environmental Management Ltd.). 2013. Risk assessment for the potential introduction of aquatic nonindigenous species through ballast water discharge at Milne Port. Prepared for Baffinland Iron Mines Corporation. Prepared by Sikumiut Environmental Management Ltd. June 4, 2013. [NIRB Registry File: BIMC ERP FEIS V8 130620-08MN053-App 8B-4-Risk Assessments-IT8E.pdf] DFO. 2014. Science review of the final environmental impact statement addendum for the early revenue phase of Baffinland's Mary River Project. DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/024: 51 pp.
QIA Comment	Results of the SEM (2013) study Baffinland cites at the start of its PCC 85 summary are erroneous and dated. The study did not follow the recommended DFO methodology and badly underestimated the risk (DFO 2014, p. 24). When repeated by DFO using the correct methodology the final invasion risk ranking for ballast water at Milne Inlet was ranked "Highest" not "Lower". The study also predates current ballast water regulations, which require treatment.
QIA Request	QIA requests that Baffinland cite reference material that is both defensible, and current, in future reporting.

Comment #	QIA 2024 NIRB MAE#6
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Document) **Section:** 4.6.10, PCC 89 Marine Environment - Ballast Water **Pages**: 312-316 (pdf p. 330 to 334) Drillet, G., and Talbot, C. 2021. Study on the implementation of the Ballast Water Management Convention in Australia 2019-2020. Prepared by SGS Australia and SGS Global Marine Services, Perth Airport, WA for Australian Government Department of Agriculture, Water and the Environment, Canberra City, ACT. 23 pp. [IMO MEPC 76/INF.56 Annex, 36 pp.] Jallal, C. 2024. High non-compliance rates found in treated ballast water in Australian ports. https://www.rivieramm.com/news-content-hub/news-content-hub/high-non-compliance-rates-found-in-ballast-water-treatment-in-australian-ports-79464 [Accessed June 28, 2025] Outinen, O., Bailey, S.A., Casas-Monroy, O., Delacroix, S., Gorgula, S., Griniene E, Kakkonen, J.E., and Srebaliene, G. 2024. Biological testing of ships' ballast water indicates challenges for the implementation of the Ballast Water Management Convention. Front. Mar. Sci. 11:1334286.doi: 0.3389/fmars.2024.1334286
QIA Comment	Baffinland has reported that, in 2024, all of its 70 ore carrier voyages conducted both exchange and treatment of their ballast water prior to arriving in Milne Port (p. 314). QIA recognizes this as a positive development. In 2024, the salinity of a single ballast water tank in each vessel was tested to provide evidence of mid-ocean exchange. All of the tanks tested were at or above a salinity of 30 ppt, indicating that exchange had occurred, and in compliance with the D-1 standard for ballast water. Biological testing was also conducted on a subset of these vessels, as part of the risk-based assessment of ballast water. This Pilot Project was conducted in 2023 and 2024 by scientists from DFO and Inuit trainees, with Baffinland's collaboration and logistical support. Samples they collected are being used to assess the efficacy of using exchange and treatment to reduce the number of live biota in ballast water and enable vessels to meet the D-2 standards for ballast water under Project operating conditions. Data from the 2024 sampling are not yet available. International testing of ballast water has found that many vessels have treatment systems that are either unable to meet D-2 standards under their

	operating conditions or are not properly maintained and/or operated (e.g., Drillet and Talbot 2021 – 36% non-compliant (NC); Jallal 2024 – 39% NC; Outinen et al. 2024 – 44 - 49% NC). These results mean compliance testing of ships' ballast water should be undertaken to ensure that their treatment systems remain operational after commissioning and meet requirements of the D-2 standard (Outinen et al. 2024).
QIA Request	QIA requests that Baffinland clarify what biological testing will be undertaken to verify that the treatment systems used by Project shipping are meeting the D2 standards reliably, under Project shipping conditions, in 2025 and subsequent years.

Comment #	QIA 2024 NIRB MAE#7
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Document) **Section:** 4.6.10 Marine Environment, PCC 91 Ballast Water **Pages**: 319 (pdf p. 319 of 641) **Document Name:** Baffinland Iron Mines 2020 Annual Report to the Nunavut Impact Review Board **Section:** 4.6.10, PCC 87 **Page:** pg. 293-295 (308-310 of 600) **Document Name:** Baffinland Iron Mines 2019 Annual Report to the Nunavut Impact Review Board, Appendix G.8 - Draft 2019 Marine Environment Effects Program and Aquatic Invasive Species Monitoring Program Report **Section:** 4.6.10 Marine Environment, PCC 91 Ballast Water **Pages:** 304-308 Chan, F.T., MacIsaac, H.J., and Bailey, S.A. 2015. Relative importance of vessel hull fouling and ballast water as transport vectors of nonindigenous species to the Canadian Arctic. Can. J. Fish. Aquat. Sci. 72, 1230–1242. doi: 10.1139/cjfas-2014-0473 Chan, F.T., MacIsaac, H.J., and Bailey, S.A. 2016. Survival of ship biofouling assemblages during and after voyages to the Canadian Arctic. Mar. Biol. 163:250.

	Fofonoff, P.W., Ruiz, G.M., Steves, B., Simkanin, C., and Carlton, J.T. 2018. National Exotic Marine and Estuarine Species Information System. http://invasions.si.edu/nemesis/. Access Date: 29-Jun -2025 Golder (Golder Associates Ltd.) 2021. Mary River Project, 2020 Marine Environmental Effects Monitoring Program (MEEMP), and Aquatic Invasive Species (AIS) Monitoring Program. Prepared for Baffinland Iron Miners Corp., Oaskville, ON, 18 August 2021. 1581 pp. Goldsmit, J., McKindsey, C.W., Stewart, D.B. and Howland, K.L. 2021. Screening for high-risk marine invaders in the Hudson Bay Region, Canadian Arctic. Front. Ecol. Evol. 9:627497. doi: 10.3389/fevo.2021.627497 Gollasch, S. 2002. The importance of ship hull fouling as a vector of species introductions into the North Sea. Biofouling, 18:105–121.
QIA Comment	"*Baffinland is in compliance with industry standards and guidelines including those set by IMO. Specific hull surveys for biofouling were not conducted in 2024 nor does Baffinland plan to conduct additional surveys outside the MEEMP and NIS/AIS programs. The hull biofouling surveys conducted between 2018 and 2020 demonstrated the effectiveness of the IMO standards and no further additional monitoring is required. Additionally, Transport Canada has not issued concerns related to TC 91 that would necessitate underwater surveys of hulls*." (Main Doc., s.4, p. 319). It is not clear how the biofouling surveys conducted between 2018 and 2020 demonstrated the effectiveness of the IMO standards. These hull fouling surveys had limited success and were unable to identify many of the taxa to species to determine whether they were nonindigenous and potentially invasive. In 2018 a remotely operated vehicle (ROV)-based underwater video was used to survey the hulls of three Project ore carriers. In 2019, despite using higher resolution video and better lighting on the ROV most taxa still could not be identified to species (2019 Ann. Rep., App. G.8, p. xi). However, barnacles were observed fouling 4 of the 5 hulls examined (2019 Ann. Rep., App. G.8, s.4.2, pg. 149). This is a concern as there are numerous invasive barnacle species (e.g., *Amphibalanus amphitrite, A. eburneus, A. improvisus*; Fofonoff et al. 2018; Chan et al. 2015, 2016; Goldsmit et al. 2021). In 2020, a survey of the *Golden Ruby* observed barnacles on the side of the hull from bow to stern and around the propeller (Golder 2021, pdf p. 1503); not one of the taxa observed on the three vessels surveyed in 2020 was identified to species (Golder 2021, pdf p. 1515).

	Under PCC 91, "*The Proponent shall develop a detailed monitoring plan for Steensby Inlet and Milne Inlet for fouling that complies with all applicable regulatory requirements and guidelines as issued by Transport Canada, and includes sampling areas on ships where antifouling treatment is not applied such as the areas where non-native species are most likely to occur.*" QIA does not support Baffinland's apparent suspension of efforts to conduct meaningful hull fouling surveys and comply with PCC 91. This approach will limit understanding of risk related to hull fouling on Project vessels. This is a concern as hull fouling is an important vector for invasive species (e.g., Gollash 2002; Goldsmit et al. 2021), and Baffinland plans to increase its annual ore shipments from 4.2 Mtpa to 18 Mtpa, with the associated increase in wetted hull area and surfaces prone to biofouling.
QIA Request	QIA recommends Baffinland reconsider its stance on hull fouling, in consultation with the Marine Environmental Working Group (MEWG), and comply with PCC 91.

Comment #	QIA 2024 NIRB MAE#9
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Document) **Section:** 4.6.5 Groundwater & Surface Water, PCC 20 - Explosives **Page**: 123-125 (pdf p. 141-143 of 641) **Section:** 4.6.5 Groundwater & Surface Water, PCC 21 – Aquatic Effects Monitoring Plan and Dustfall Monitoring **Page**: 126128 (pdf p. 144-146 of 641) **Section:** 4.6.7 Freshwater Environment, PCC 48(a) – Freshwater Aquatic Environment – Arctic char **Pages**: 185-187 (pdf p. 203-205 of 641) **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board, Appendix G.4.2 Mary River Project - Lake Sedimentation Monitoring 2023/2024 **Section:** 3.4.1 Littoral Zone **Pages:** 30 to 33 (pdf p. 36 to 39 of 120) **Section:** 3.4.2 Profundal Zone **Pages:** 33 to 35 (pdf p. 38 to 40 of 119) Stewart, D.B., and Bernier, L.M.J. 1988a. An aquatic resource survey of southern Baffin Island, Northwest Territories. Lands Directorate of

	Environment Canada and Northern Environment Branch of Indian and Northern Affairs Canada, Background Report 5: 121 p. + map. Stewart, D.B., and Bernier, L.M.J. 1988b. An aquatic resource survey of central Baffin Island, Northwest Territories. Lands Directorate of Environment Canada and Department of Fisheries and Oceans, Background Report 8: 129 p. + map.
QIA Comment	The objective of the 2024 Mary River Project Core Receiving Environment Monitoring Program (CREMP) was to assess potential mine-related impacts on the chemical and biological conditions of aquatic environments near the mine after ten years of operations (PCC 20, p. 124; see also PCC 21 and PCC 48(a). In summarizing trends in the results, Baffinland reported, "*Overall, the most significant mine-related influences have been observed within the Sheardown Lake System, where most watercourses/waterbodies assessed in the CREMP have shown some degree of mine-related influence. Links between mining activities within the Sheardown Lake System and the observed changes have been identified, and corresponding mitigation measures and recommendations continue.*" (PCC 20, p. 124). In Sheardown Lake NW "*the relative proportion of Chironomidae at the littoral BIC stations (DL0-01-4 and DL0-01-9) was significantly and strongly negatively correlated with both sedimentation rate and accumulation thickness estimates*..." (App. G.4.2, s. 3.4.1, p. 30). Chironomid larvae are particularly important prey in the diet of both small and large Arctic char in Baffin Island freshwater systems in July and August (Stewart and Bernier 1988a, b). So, as Baffinland noted, a shift in the benthic invertebrate composition (BIC) that reduces chironomid availability could negatively affect juvenile growth, reproduction, and overall survival of Arctic char. In the profundal zone of Sheardown Lake NW "...*results of the correlation analysis for DL0-01-2 (BIC) and DEEP-1 (sediment trap) stations indicated that, during the open water season and over the mine operational period (2015 to 2024), benthic invertebrate densities were significantly and strongly negatively correlated with sedimentation rate, whereas Simpson's Evenness exhibited a strong positive correlation with sedimentation rate (Table 3.2, Appendix Table C.1, Appendix Figure C.5)*" (App. G.4.2, s. 3.4.2, p. 33). And, "*the relative proportions of the collector-gatherer FFG [functional feeding group] were significantly and strongly negatively correlated with the sedimentation rate, whereas the relative proportions of the filterer FFG showed a similar (i.e., strong, negative) significant correlation with sediment*

	accumulation thickness estimates (Table 3.2, Appendix Table C.1, Appendix Figures C.5 to C.8)."(p. 35). These results suggest *"that as sedimentation rate/accumulation estimates increase, the relative abundance of these FFGs (i.e., filterers and collector-gatherers) decreases."* (p. 35) These ecological shifts are a concern given Baffinland's plans to increase ore production from 4.2 Mtpa to 18 Mtpa. Baffinland argues that the "*sedimentation rates and accumulation thicknesses were below the Low Action TARP thresholds and FEIS predictions in 2024, and do not appear to be affecting the total benthic invertebrate densities in Sheardown Lake NW*" (App. G.4.2, s. 3.4.1, p. 33). However, the TARP thresholds were not developed based on Project-generated sediment or benthic freshwater invertebrates. and changes in important prey density—particularly chironomids, are likely more important than changes in total benthic invertebrate density. The benthic invertebrate program is also point-in-time, not spread throughout the open water season. These information gaps create uncertainty regarding the overall effects of increasing sediment accumulation thicknesses. Further monitoring is needed to enable direct comparisons of the chemical components of sediment trap and dustfall trap samples and better understand how they are related (App. G.4.2, s.3.4.1, p. 30). Only one year of sediment trap chemistry is currently available for comparison. Total organic carbon (TOC) should be added to the suite of analyses to better understand its relationship to relative abundance of chironomids (s. 3.4.1, p. 32 footnote 20). The Lake Sediment Monitoring Program is an important tool for gaining understanding of factors that influence the benthic invertebrate composition and Arctic char in Sheardown Lake NW. It should be continued over the long term to provide early warning of Project-related impacts as the mine increases production.
QIA Request	QIA requests Baffinland: 1) continue collecting sediment trap and dustfall trap samples for chemical analyses and direct comparisons of their constituents, adding TOC to the current suite of analyses, and 2) continue the sediment monitoring program over the long term to improve understanding of factors that influence the benthic invertebrate composition and Arctic char population in Sheardown Lake NW, and provide early warning of Project-related impacts as the mine increases production.

Comment #	QIA 2024 NIRB MAE#10
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board (Main Doc) **Section:** 4.6.4 Hydrology and Hydrogeology, PCC 16 Water Infrastructure **Pages**: 103-106 (pdf p. 122-124 of 64) **Section:** 4.6.4 Hydrology and Hydrogeology, PCC 19 Water Infrastructure Monitoring **Pages**: 116-119 (pdf. p. 134-137 of 641) **Section:** 4.6.7 Freshwater Environment, PCC 45 General **Pages**: 177-179. (pdf p. 195-297 of 641) **Section:** 4.6.7 Freshwater Environment, PCC 47 Watercourses **Pages**: 182-183 (pdf p. 200-201 of 641) **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board, App. G.2.8 Tote Road Fish Habitat Monitoring (7 Parts) **Section:** Part 1, s. 1.1 Mary River Project **Page:** 2 (pdf p. 6 of 135) **Section:** Part 1, s. 3.3 **Page:** 7 (pdf p. 11 of 135) **Section:** Part 1, Table 3, pdf p. 134-135 continued in Part 2, pdf p. 1-2 **Section:** Part 2, Table 4, pdf p. 3-7 of 73 **Section:** Part 6, App. C **Page:** 2 (pdf p. 12 of 31). **Document Name:** Baffinland Iron Mines 2024 Annual Report to QIA and NWB on Operations (2024 QIA NWB ARO) **Section:** 2.4 **Pages**: 17 (pdf p. 36 of 94) **Section:** 10.1.4 **Pages:** 67 (pdf p. 86 of 94) **Document Name:** Baffinland Iron Mines 2024 Annual Report to QIA and NWB on Operations, Appendix C.1.1 Construction Summary Report Round CSP Culverts **Section:** 5.2 **Page:** 19 (pdf p. 29 of 38) **Section:** 5.3 **Page:** 20 (pdf p. 30 of 38) **Section:** 6 **Page:** 22 (pdf p. 32 of 38) **Document Name:** Baffinland Iron Mines 2023 Annual Report to QIA and NWB for Operations (2023 QIA NWB ARO) **Section**: 7.3.8 **Page:** 36 (62 of 90)

QIA Comment	"*On January 19, 2024, DFO issued a Letter of Advice (LOA) 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 (DFO, 2024)."* (2023 QIA NWB ARO, s.7.3.8, p. 36). "*In parallel with the issuance of the LOA, DFO issued a new Correction Measure order on February 5, 2024 requiring all 20 previously identified culverts to be remediated and to be supported by new sediment and erosion control and environmental monitoring plans*." (2024 QIA NWB ARO, s.2.4, p. 17). This work is important to ensure the unobstructed passage of juvenile Arctic char between their wintering habitats downstream of the Tote Road and summering habitats upstream of the Tote Road. It is pertinent to water infrastructure (PCC 16 and PCC 19) and the freshwater environment (PCC 45 and PCC 47). In February to May 2024, prior to the spring freshet, seven (7) of the ten (10) culvert crossings identified in the DFO LOA were removed and rebuilt (BG-04, CV-001, CV-057, CV-059, CV-102, CV-106, CV-216; App. C.1.1, s. 6, p. 22). This work was complicated by the presence of permafrost and ice lenses (App. G.2.8, s. 1.1, p. 2). Following the spring freshet three (3) of these crossings (CV-102, Cv-106, CV-216) were found to have deficiencies and require further work related to settlement (CV-106 and CV-216) and sub-surface seepage (CV-102) (2024 QIA NWB ARO, s. 10.1.4, p. 67; App. C.1.1, s. 5.3, p. 20). One culvert (CV-216) was identified as a priority for re-construction in 2025, to improve fish passage and re-establish road integrity at the crossing. Between 21 and 24 September, overland flooding from an extreme rainfall event damaged six (6) culvert crossings, one (1) of which (CV-049) was completely washed out (App. G.2.8, Part 6, App. C, pdf p. 12 of 31). These were repaired in the following weeks. Baffinland is working with DFO to re-evaluate geotechnical work and engineering for the remaining culvert crossings based on lessons learned from the 2024 construction program (App. C.1.1, s. 6, p. 22). Following culvert installation Baffinland conducted environmental monitoring at each crossing to assess fish passage during the open water season and identify issues requiring mitigation (App. C.1.1, s. 5.2, p. 19). Forty-nine (49) fish-bearing Tote Road stream crossings were assessed between 11 and 16 July 2024 (App. G.2.8, Part 1, s. 3.3, p. 7). The height of any perches and flow velocities and depths inside the inflow and outflow were measured for each culvert. Catch totals that were higher in 2024 than in previous years at many crossings were attributed to timing the survey when water velocities were lower and water temperatures higher (see also p. 9). The catch difference raises

	questions about the pros and cons of sampling earlier or later in the spring (i.e., during or following the peak freshet). It suggests there may be advantages to having greater flexibility in the timing of culvert sampling, to ensure comparability and/or optimize the catches. In the spring of 2024, char were not captured or observed at six crossing sites (CV-115, CV-128a, CV-211, CV-212, CV-030, and BG-03), or upstream of 12 others (i.e., CV-114, CV-106, CV-104, CV-078, CV-061b, CV-040, CV-215, CV-021, CV-186, CV-187, and BG-33) (App. G.2.8, Part 1, s. 3.3, p. 8). Some of these absences are due to potential fish passage issues (CV-114, CV-061b, BG-33, CV-215, and CV-186). Perching of culvert crossings remains a common problem, the flow velocity in some culverts exceeded 1 m/s, and sediment deposition and sub-surface flow were observed that may also limit fish passage (App. G.2.8, Part 1, Table 3, pdf p. 134-135 continued in Part 2, pdf p. 1-2). Samples sizes of fish caught upstream and downstream of the culvert crossings are sometimes low or quite different (App. G.2.8, Part 2, Table 4, pdf p. 3-7 of 73). This can make it more difficult to assess whether a culvert is limiting upstream passage of younger year class(es) of Arctic char. Has Baffinland compared the length frequency distribution of all the upstream samples collected over time at a particular crossing with those collected downstream to see how they overlap in terms of fish size and age (e.g., CV-111, CV-099, CV-079, CV-072, CV-057, BG-24, CV-225, BG-01)? Despite ongoing concern regarding fish passage and delays in cover crossing remediation, QIA recognizes Baffinland's 2024 culvert replacement and remediation work as a positive development, as is the cooperation between DFO and Baffinland to improve culvert designs (App. C.1.1, s. 6, p. 22). QIA looks forward to completion of the remaining thirteen (13) culvert installations and hopes these efforts and ongoing monitoring and remediation will solve the fish passage issues.
QIA Request	QIA requests Baffinland: • provide an update by the end of September 2025 on the remediation status of the culvert crossings that are being re-designed by DFO and Baffinland, and another update by the end of March 2026 on progress prior to the 2026 freshet, and • provide information on whether in situ water velocities in the newly installed culverts are as designed

	QIA recommends Baffinland: • complete Tote Road culvert remediation prior to the 2026 freshet to ensure unobstructed fish passage by juvenile Arctic char, • continue to assess whether the culvert crossings offer safe and unobstructed passage upstream in spring and downstream in fall for a range of Arctic char year classes, and • provide its annual culvert fish passage study in the documentation for reviews of both the QIA NWB Annual Report for Operations and NIRB Annual Report.

Comment #	QIA 2024 NIRB MAE#11
References	2024 NIRB Annual Report, Baffinland Iron Mines, 2024 Annual Report to the Nunavut Impact Review Board. May 30, 2025. Project Certificate Term and Condition No. 16 and 17, P. 122-132
QIA Comment	Baffinland states that "*Baffinland is continuing to work with DFO to address fish passage issues along the Tote Road…In January 2024, DFO issued a Letter of Advice for Baffinland's Tote Road Culvert Remediation proposal to implement a permanent crossing solution for 10 corrugated steel pipe crossings along the Tote Road*" (P. 123). Further, post-construction monitoring of culverts along the Tote Road in 2024 identified *"deficiencies at select crossings CV-106, CV-216) post-freshet conditions*" (P. 135), and that further engineering work was to be conducted to amend these deficiencies. It was unclear if these deficiencies were amended before the 2025 freshet.
QIA Request	Baffinland should clarify whether deficiencies at Tote Road crossings CV-106 and CV-216 had been amended prior to 2025 freshet.

Socioeconomic Environment (QIA 2024 NIRB SE#X)

Comment #	QIA 2024 NIRB SE#1
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.1, PC Condition 129 **Page:** 426 to 429 (PDF p. 444 to 447 of 641)

Comment	PC Condition 129 states, “The Proponent is strongly encouraged to engage in the work of the Qikiqtaaluk Socio-Economic Monitoring Committee (QSEMC) along with other agencies and affected communities, and it should endeavor to identify areas of mutual interest and priorities for inclusion into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities, and the North Baffin region as a whole.” The QSEMC did not meet in 2024 due to scheduling constraints, but the Mary River Socio-Economic Monitoring Working Group (SEMWG), a sub-committee of the QSEMC, did meet via teleconference on November 15, 2024. Topics included the revised Terms of Reference, the 2023 Socio-Economic Monitoring Report, and updates from GN, QIA, and CIRNAC. However, the Inuit Employee Survey was not administered in 2024, and no alternate mechanism was described to gather Inuit employee feedback or evaluate socio-economic effects across the wider Inuit population during the reporting year 2024 NIRB Annual Report.
Request	QIA requests Baffinland provide additional detail on why the survey was not administered, and how Inuit perspectives were considered in the absence of the 2024 Employee Survey, such as alternative measures of input or feedback. QIA asks for further clarification as to how socio-economic effects were reviewed during the SEMWG meeting. QIA also requests that Baffinland continue to support re-engagement of the full QSEMC and resume survey activities to inform future evaluations.

Comment #	QIA 2024 NIRB SE#2
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.1, PC Condition 130 **Page:** 430 to 431 (PDF p. 448 to 449 of 641)
Comment	PC Condition 130 states, “The Proponent should consider establishing and coordinating with smaller socio-economic working groups to meet Project-specific monitoring requirements throughout the life of the Project.” Baffinland reports that it continues to engage with the QSEMC and SEMWG on the Project’s socio-economic monitoring program. A revised Terms of Reference for the SEMWG was completed in 2024 and discussions were held

	on a variety of topics, including the 2023 Socio-Economic Monitoring Report and priorities for 2025.
Request	Baffinland has not addressed our earlier request, so QIA re-iterates the request that Baffinland continue to support SEMWG activities and clarify whether additional, smaller socio-economic working groups will be established to address specific regional or thematic monitoring needs, consistent with the PC. QIA would like to further understand how varying Inuit demographics will be represented across the SEMWG.

Comment #	QIA 2024 NIRB SE#3
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.1, PC Condition 131 **Page:** 432 to 433 (PDF p. 450 to 451 of 641)
Comment	PC Condition 131 states, “The Qikiqtaaluk Socio-Economic Monitoring Committee is encouraged to engage in the monitoring of demographic changes including the movement of people into and out of the North Baffin communities and the territory as a whole. This information may be used in conjunction with monitoring data obtained by the Proponent from recent hires and/or out-going employees in order to assess the potential effect the Project has on migration.” Baffinland continues to rely on outdated public datasets (2016–2019) and internal HR surveys for migration-related insights. No partnerships with Government of Nunavut or other agencies were noted to improve access to up-to-date migration data.
Request	QIA requests Baffinland seek updated, reliable sources of demographic data or establish consistent partnerships to access this information, to support more current and meaningful assessment of Project impacts on migration. This is a request that was made in the previous year. QIA requests that Baffinland examine the updated 2021 Statistics Canada demographic information, and make specific requests to Statistics Canada if data suppression is limiting publicly available information. Baffinland may also seek alternative data sources from Hamlet Organizations or the GN to supplement missing data.

Comment #	QIA 2024 NIRB SE#4

References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.1, PC Condition 132 **Page:** 434 to 435 (PDF p. 452 to 453 of 641)
Comment	PC Condition 132 states, "The Proponent is encouraged to partner with other agencies such as Hamlet organizations in the North Baffin region, the Municipal Training Organization, and the Government of Nunavut in order to adapt pre-existing, or to develop new programs which encourage Inuit to continue living in their home communities while seeking ongoing and progressive training and development. Programs may include driver training programs offered within Hamlets, providing upgraded equipment to communities for use in municipal works, providing incentives for small businesses to remain operating out of their community of origin, or supplementing existing recreational facilities and programming in North Baffin communities." Baffinland provided a list of training activities (e.g., Work Ready Program sessions), but did not specify if Nunavut Arctic College was involved in delivering any of these or clarify what portion of the training was mine-related or credentialed. There is insufficient information on how programs were adapted in response to Inuit feedback or employment needs.
Request	QIA requests Baffinland provide further detail on whether any of the reported training programs were delivered in partnership with Nunavut Arctic College, whether they were mine-related or led to recognized credentials, and how Inuit input or employment trends informed program design. So we can understand the scope of Baffinland's activities, QIA requests clarification on how many training program spaces are made available, how many Inuit enroll, how many Inuit complete the program, and how many graduates are hired into paid employment related to their training.

Comment #	QIA 2024 NIRB SE#5
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.1, PC Condition 133 **Page:** 436 to 440 (PDF p. 454 to 458 of 641)
Comment	PC Condition 133 states, "The Proponent is encouraged to work with the Qikiqtaaluk Socio-Economic Monitoring Committee and in collaboration with the Government of Nunavut's Department of Health and Social Services, the

	Nunavut Housing Corporation and other relevant stakeholders, design and implement a voluntary survey to be completed by its employees on an annual basis in order to identify changes of address, housing status (i.e., public/social, privately owned/rented, government, etc.), and migration intentions while respecting confidentiality of all persons involved. The survey should be designed in collaboration with the Government of Nunavut's Department of Health and Social Services, the Nunavut Housing Corporation and other relevant stakeholders. Non-confidential results of the survey are to be reported to the Government of Nunavut and the NIRB. " Baffinland confirms that the Inuit Employee Survey was not administered in 2024. While previous years' data are summarized, no alternative method for collecting 2024 data or timeline for reinitiating the survey is provided.
Request	QIA requests Baffinland confirm its plans for reintroducing the Inuit Employee Survey in 2025, and provide a clear explanation how the absence of 2024 data was considered in the monitoring and reporting of demographic trends, including potential implications for housing status, migration intentions, and workforce retention analysis. QIA also request clarification on whether any alternative methods or interim data collection strategies were used to offset the data gap and ensure continue to in demographic monitoring.

Comment #	QIA 2024 NIRB SE#6
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.1, PC Condition No. 134 **Page:** 441 to 445 (PDF p. 459 to 463 of 641)
Comment	PC Condition 134 states, "The Proponent shall include with its annual reporting to the NIRB a summation of employee origin information as follows: a. The number of Inuit and non-Inuit employees hired from each of the North Baffin communities, specifying the number from each. b. The number of Inuit and non-Inuit employees hired from each of the Kitikmeot and Kivalliq regions, specifying the number from each. c. The number of Inuit and non-Inuit employees hired from a southern location or other province/territory outside of Nunavut, specifying the locations and the number from each. d. The number of non-Canadian foreign employees hired, specifying the locations and number from each foreign point of hire."

	Baffinland continues to report on employment using Full-Time Equivalent (FTE) values rather than individual headcount, and no regional breakdown of headcount is provided. Further QIA is concerned that Baffinland has not reported accurate information, notably the headcount for Baffinland Contractors in the NIRB Annual Report is different than in the IIBA Implementation Report. This issue has been repeatedly raised in previous years' submissions yet remains unaddressed.
Request	QIA re-iterates the request that Baffinland report employment by headcount, disaggregated by region of origin, and provide a rationale for not including this data if it remains unavailable. Please also confirm that the contractor headcount numbers provided in the report are accurate. Baffinland continues to not directly respond to the request.

Comment #	QIA 2024 NIRB SE#7
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.2, PC Condition No. 135 **Page:** 446 to 448 (PDF p. 464 to 466 of 641)
Comment	PC Condition 135 states, "The Proponent is encouraged to consider offering additional options for work/study programs available to Project employees (in addition to study programs at project sites that would be offered to employees when off-shift)." Baffinland stated, "The Q-STEP team continues to seek additional third party funding to support the continuation of apprenticeship training and offer other opportunities at Baffinland. Baffinland will continue to examine programs offered in other jurisdictions, including those offered by other mining companies operating in similar conditions, to determine their potential suitability for offer at the Mary River Project." QIA agrees with Baffinland's assessment of compliance.

Request	QIA requests that meaningful and transferable skills also include completing schooling or high school equivalency, which can promote transferable skills. QIA again requests Baffinland continue to provide training programs and information on any additional offerings for work/study programs available, including whether participants were hired by the company.

Comment #	QIA 2024 NIRB SE#8
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.2, PC Condition No. 139 **Page:** 458 to 460 (PDF p. 476 to 478 of 641)
Comment	PC Condition 139 states, “Prior to commencing construction, the Proponent is requested to undertake and provide the results of a detailed labour market analysis which provides quantitative predictions of the number of employees that may reasonably need to be sourced from southern Canada and from foreign markets, identifying where applicable, the country of origin for the foreign labour. Within 90 days of the issuance of the Project Certificate, the Proponent is required to submit an updated Labour Market Analysis which considers requirements of the Early Revenue Phase as well as hiring points within Nunavut and outside of the North Baffin region and RSA.” Baffinland stated, “The Labour Market Analysis review is conducted tri-annually.” QIA does not agree with Baffinland’s assessment of compliance. Baffinland does not provide the information required by this PC Condition. Baffinland’s Labour Market Analysis does not provide useful information to come to any clear conclusions. Rather, Baffinland expresses the need to source skilled employees from Southern Canada and foreign countries. Without providing the requested quantitative number of these hires, there is not enough information to come to this conclusion. Baffinland also does not provide which country, if any, from which they hire foreign workers. QIA is also concerned that there may be important differences between skilled position categories

	(skilled/unskilled labour) that has not been shown here, but could result in important measures to encourage Nunavut hiring.
Request	QIA requests Baffinland report on the quantitative number of southern/foreign employees, the skilled level of these positions, 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. QIA notes that Baffinland did not address this same request that QIA made last year.

Comment #	QIA 2024 NIRB SE#9
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.4, PC Condition No. 149 **Page:** 489 to 490 (PDF p. 507 to 508 of 641)
Comment	PC Condition 149 states, “Prior to the commencement of operations, the Proponent is required to undertake an analysis of the risk of temporary mine closure, giving consideration to how communities in the North Baffin region may be affected by temporary and permanent closure of the mine, including economic, social and cultural effects and taking into consideration the potential drop in employment between the construction and operations phases of the Project.” Baffinland stated, “Due to experiencing operational uncertainty and the Project being assessed as being in a ‘moderate to high’ risk profile for temporary closure in 2022, Baffinland implemented a variety of mitigation measures to promote the wellbeing employees in the event of temporary closure.” Baffinland stated, “In the case of temporary mine closure, Baffinland’s socio-economic goal is to mitigate unanticipated losses in Project economic benefits for local communities by addressing adverse effects through relevant employee, family, and community programs and support. When the Project is approaching closure, Baffinland will work with government and community stakeholders to implement programs to support employee

	transition. Baffinland is also committed to working with the QIA to develop a Mine Closure Working Group that will include members from local communities and will address biophysical and socio-economic issues related to temporary and permanent site closure." QIA notes that the risk profile for temporary closure in 2024 was not provided by Baffinland.
Request	QIA requests Baffinland indicate the risk profile for temporary closure in 2024 and provide details about the Mine Closure Working Group in the NIRB Annual Report. QIA notes that Baffinland has not directly addressed this same request that QIA provided last year.

Comment #	QIA 2024 NIRB SE#10
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.4, PC Condition No. 150 **Page:** 491 to 493 (PDF p. 509 to 511 of 641)
Comment	PC Condition 150 states, "The proponent will ensure the following: a. The Proponent will maintain, where possible, a minimum flying altitude of 2,000 feet over the park, except for approaches to land, take-off or for safety reasons b. The Proponent will ensure that certification of noise compliance is current, where compliance is applicable c. For the purpose of briefing Park visitors, the Proponent will provide Parks Canada (1) prior to commencing the shipping season, with planned daily shipping schedules, and (2) annually, with air traffic information, and (3) to provide updates when significant variations from these are expected d. The Proponent is strongly encouraged to provide due consideration to wilderness experience during its operations in the open water season, especially during the month of August which is typically a time of high use by sea kayakers."

	QIA does not agree with Baffinland's assessment of compliance. Baffinland does not provide the information detailing efforts to ensure current noise compliance certification, planned daily shipping schedules, annual air traffic information, and considerations to wilderness experience during its operations in open water season.
Request	QIA requests Baffinland provide all required information identified in PC Condition 150. QIA requests Baffinland to include all required information in future Annual Reports. QIA notes that this is the same request as last year.

Comment #	QIA 2024 NIRB SE#11
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.4, PC Condition No. 151 **Page:** 494 to 496 (PDF p. 512 to 514 of 641)
Comment	PC Condition 151 states, "The Proponent is encouraged to investigate measures and programs designed to assist Project employees with homeownership or access to affordable housing options." Baffinland stated, "Baffinland regularly administers an Inuit Employee Survey, which collects data on employee housing status and other topics. Baffinland administered the most recent survey from October 23 to December 1, 2023. Baffinland occasionally provides additional support to Project employees to support homeownership. In 2024, Baffinland continued to provide basic financial literacy training, which covers topics such as budgeting that considers rent/housing as well as loans, through the Work Ready Program (WRP)." Baffinland stated, "Results from the Inuit Employee Survey indicate a large proportion of respondents are unaware of how to go about purchasing a house as well as are unaware of housing-related programs. Baffinland recognizes these potential barriers to homeownership by Inuit employees and contractors. In efforts to address these potential barriers, Baffinland looks forward to engaging with the GN and the NHC through the MoU. Going forward, and if

	agreed upon with the GN, Baffinland will report on successes and achievements under the MoU in subsequent annual reports." QIA believes the information provided to be insufficient. Baffinland has not implemented measures to assist access to affordable housing for their employees, despite statistics demonstrating a lack of knowledge from their employees on the topic.
Request	QIA requests Baffinland consider additional programs or measures to facilitate homeownership or access to affordable housing. QIA requests that Baffinland directly address housing supply and financial/housing ownership literacy and consider other successful housing initiatives led by the industry in other parts of Nunavut: https://www.premier.gov.nu.ca/en/new-modular-homes-arrive-kivalliq-region-through-agnico-eagle-mines-partnership QIA notes that Baffinland has not provided a direct response to this same request as last year.

Comment #	QIA 2024 NIRB SE#12
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.5, PC Condition No. 153 **Page:** 502 to 504 (PDF p. 520 to 522 of 641)
Comment	PC Condition 153 states, "The Proponent is encouraged to employ a mental health professional to provide counselling to Inuit and non-Inuit employees in order to positively contribute toward employee health and well-being." QIA agrees with Baffinland's assessment of compliance.
Request	QIA requests Baffinland provide information about access to mental health counseling for employees who are not on site. Services should be offered in both English and Inuktitut.

Comment #	QIA 2024 NIRB SE#13
References	**Document Name:**

	Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.5, PC Condition No. 154 **Page:** 505 to 507 (PDF p. 523 to 525 of 641)
Comment	PC Condition 154 states, “The Proponent shall work with the Government of Nunavut and the Qikiqtaaluk Socio- Economic Monitoring Committee to monitor potential indirect effects of the Project, including indicators such as the prevalence of substance abuse, gambling issues, family violence, marital problems, rates of sexually transmitted infections and other communicable diseases, rates of teenage pregnancy, high school completion rates, and others as deemed appropriate.” Baffinland stated, “Due to logistical challenges in convening of the QSEMC, committee members did not meet in 2024. However, the MRSEMWG convened in 2024, which included discussion of monitoring results from the 2023 Socio-Economic Monitoring Report, data limitations, and feedback on how to address challenges posed by data limitations. Baffinland is committed to continuing discussions with the QSEMC and MRSEMWG on how to improve monitoring data.” Further, only graduation rates, drug violations, and health care visits were reported on in the 2024 report related to the information referenced in this PC. Neither the body of the Annual Report, nor the SE Monitoring report (Appendix G.7.1) provides details on gambling or marital problems, or rates of teen pregnancy as per PC 154, despite these issues being raised in the QSEMC. While rates of communicable diseases are reported on using dated 2008 and 2016 figures only.
Request	QIA requests Baffinland provide the specific information to monitor indirect effects of the project as requested in PC 154, notably gambling, marital problems, and rates of teen pregnancy.

Comment #	QIA 2024 NIRB SE#14
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.5, PC Condition No. 155

	Page: 508 to 510 (PDF p. 526 to 528 of 641)
Comment	PC Condition 155 states, “The Proponent is strongly encouraged to provide the NIRB with an updated report on its development of mitigation measures and plans to deal with potential cultural conflicts which may occur at site as these may become needed.” QIA believes the information provided to be insufficient. Baffinland provides information regarding existing mitigation measures to deal with potential cultural conflicts on page 508-509 of the 2024 NIRB Annual Report and updates on these measures for 2023 (not 2024) are provided on page 510. However, Baffinland does not demonstrate any intent to provide NIRB with an updated measures for 2024 as encouraged by the PC Condition.
Request	QIA requests Baffinland describe their intent in providing an updated report on 2024 activities to deal with potential cultural conflict at site. QIA notes that this is the same request as last year, with clarifications added, as Baffinland has not directly addressed the QIA’s request.

Comment #	QIA 2024 NIRB SE#15
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.5, PC Condition No. 157 **Page:** 514 to 517 (PDF p. 532 to 535 of 641)
Comment	PC Condition 157 states, “The Proponent should consider providing counseling and access to treatment programs for substance and gambling addictions as well as which address domestic, parenting, and marital issues that affect employees and/or their families.” Baffinland stated, “Baffinland will continue to provide employee access to the EFAP and on-site mental health counsellors, on-site Inuit Cultural Advisors, and site physician assistants.” QIA agrees with Baffinland’s assessment of compliance. However, QIA is interested in understanding how satisfied Inuit employees are with these

	services and if there are any steps Baffinland can take to improve these services for Inuit employees.
Request	QIA requests Baffinland clarify level of satisfaction Inuit employees have with these services and if there are any steps Baffinland is taking to address concerns.

Comment #	QIA 2024 NIRB SE#16
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.7.6, PC Condition No. 158 **Page:** 518 to 520 (PDF p. 536 to 538 of 641)
Comment	PC Condition 158 states, “The Proponent is encouraged to work with the Government of Nunavut and other parties as deemed relevant in order to develop a Human Health Working Group which addresses and establishes monitoring functions relating to pressures upon existing services and costs to the health and social services provided by the Government of Nunavut as such may be impacted by Project-related in-migration of employees, to both the North Baffin region in general, and to the City of Iqaluit in particular.” Baffinland stated that it “actively engages the Government of Nunavut through the SEMWG and QSEMC. Baffinland presents indicator performance data relating to pressure on existing health and social services through these working groups. Furthermore, 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 Government of Nunavut would be repetitious in nature.” QIA disagrees with Baffinland’s conclusion.
Request	QIA requests Baffinland develop a Human Health Working Group alongside the Government of Nunavut. QIA notes that this is the same request as last year and has not been directly addressed by Baffinland.

Inuit Knowledge, Culture, Land and Resource Use and Inuit Qaujimajatuqangit (QIA 2024 NIRB CRLU/IQ#X)

Comment #	QIA 2024 NIRB CRLU/IQ#1
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board Main Body **Section:** 4.7.7, PC Condition 162 & 163 **Page:** 528 to 532 (PDF p. 546 to 550 of 641)
QIA Comment	The objective of PC Condition 162 is "To ensure the ongoing and consistent involvement of Elders and community members in developing and revising monitoring and mitigation plans" (525). Similar to previous years, Baffinland outlines a number of mechanisms to involve Elders and community members through in-person community meetings in Igloolik, Pond Inlet, and Sanirajak. Engagement took place to gather feedback on Fisheries Act Authorization application for the Steensby Component and SOP2, and facilitated a community gathering. Participation in MEWG and TEWG meetings and end of shipping season meetings took place along with call-in radio shows. As per QIA's comment from previous years, Baffinland has only addressed the first half of this condition and does not provide information on how these engagement mechanisms *ensure* involvement in developing and revising monitoring and mitigation plans. No information describes the ways these engagements have resulted in updates to plans. There is no evidence provided that describes how Baffinland is meaningfully applying community engagement results in their work. Similarly, QIA reiterates its request that Baffinland provide some basic evaluation data regarding engagement on mitigation and monitoring, including quantitative (e.g., participation metrics) and qualitative (e.g., participant satisfaction) aspects of engagement. This evaluation data would allow to evaluation of trends (currently not filled in on page 530 of the Annual Report) and for identifying ways of improvement engagement.

QIA Request	Baffinland has not addressed QIA's comment. QIA re-iterates the request that (a) Baffinland provide concrete examples from its engagement activities describing how community member and Elder input has influenced or informed Baffinland's mitigation or monitoring plans. QIA additionally requests that Baffinland provide some basic evaluation data regarding engagement on the topic of mitigation and monitoring that is both quantitative (e.g., participation metrics) and qualitative (e.g., participant satisfaction).

Comment #	QIA 2024 NIRB CRLU/IQ#2
References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board Main Body **Section:** 4.7.4, PC Condition 148 **Page:** 484 to 488 (PDF p. 502 to 506 of 641)
QIA Comment	PC Condition 148 reads, "The Proponent is encouraged to undertake collaborative monitoring in conjunction with the Qikiqtaaluk Socio-Economic Monitoring Committee's monitoring program which addresses Project harvesting interactions and food security, and which includes broad indicators of dietary habits." Similar to previous annual reports, Baffinland does not provide information on project interactions with harvesting, food security, and dietary habits for the larger Inuit population. Baffinland reports on how Project employment has impacted their employees' families' ability to participate in harvesting and other land-based activities. No information is provided on Project interactions with harvesting activities and opportunities. QIA also recognizes Baffinland's ongoing funding of QIA's Inuit Stewardship Program and its contributions to other programs which support food security in area communities including school lunch programs and community food bank donations.
QIA Request	QIA re-iterates our request from previous years that continues to not be addressed. QIA requests that Baffinland provide information Project interactions on food security and harvesting for Inuit.

Comment #	QIA 2024 NIRB CRLU/IQ#3

References	**Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board **Section:** 4.6.8 Project Certificate Term and Condition No. 49 through 64 **Page:** 188 to 241 (PDF p. 206 to 259 of 641) **Document Name:** Baffinland Iron Mines 2024 Annual Report to the Nunavut Impact Review Board; Appendix G.5.1 **Section:** Appendix A (Table A.1); Section 9.3.1 **Pages:** p. 2; p. 135
QIA Comment	Baffinland has designed and is implementing terrestrial environment monitoring programs. For several years, QIA has requested that Baffinland describe if and how IQ has informed terrestrial environment monitoring design, analysis and interpretation of results, as well as conclusions. In Baffinland's response to QIA comments respecting the 2021 Annual Monitoring Report, Baffinland identified that "*as part of the Phase 2 submission, Baffinland summarized how Inuit Qaujimajatuqangit has been incorporated throughout the project, including monitoring programs*" (Baffinland Response to Comments Received for the 2021 Annual Monitoring Report PDF p. 27). This response suggests that IQ has been incorporated into monitoring programs; however, the inclusion of IQ is not evident from the 2022 or 2023 Annual Monitoring Reports. Baffinland provided no response to QIA's comments regarding the inclusion of IQ in 2023. In the 2023 Terrestrial Environment Annual Monitoring Report, Inuit Qaujimajatuqangit is mentioned only two times– 1. "Work completed for the Terrestrial Environment Monitoring Program is guided by Inuit Qaujimajatuqangit and the Terrestrial Environment Mitigation and Monitoring Plan" (Appendix G.5.1, p. 1 of 201), 2. "The HOL survey methods were developed in consultation with the TEWG… and incorporated Inuit Qaujimajatuqangit into strategies for detecting caribou" (Appendix G.5.1, p 160 of 201). In the 2024 Terrestrial Environment Annual Monitoring Report, Inuit Qaujimajatuqangit is mentioned only two times:

	1. “The HOL survey methods were developed in consultation with the TEWG… and incorporated Inuit Qaujimajatuqangit into strategies for detecting caribou” (Appendix G.5.1, p 3 of 125). 2. “…Dust Audit Committee’s feedback and has gained valuable insights from the Inuit Qaujimajatuqangit and community knowledge shared to date. (Appendix G.5.1, p 53 of 125). QIA recognizes that IQ has been used to develop and implement monitoring programs; however, this is not described in Baffinland’s Annual Monitoring Reports. The Annual Reports uses western scientific references and methods to monitoring. IQ is a valuable component to the development of these programs, more information needs to be provided to evaluate how well IQ has been considered.
QIA Request	As requested numerous times in the past, Baffinland is requested to describe in more detail how IQ was used to design terrestrial, marine, and freshwater monitoring programs and in their analysis and interpretation of results. In this description it should be clear how Baffinland meets Inuit expectations re: Ownership, Control, Access and Possession (OCAP).