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Qikiqtani Inuit Association

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Serving the communities of

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Arctic Bay

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Clyde River

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Resolute Bay

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Sanirajak

October 23, 2024

Robert Hunter

Nunavut Water Board

PO Box 119

Gjoa Haven, NU X0B 1J0

Email: licensing@nwb-oen.ca

Subject: QIA Technical Review of Water Licence Renewal Application No: 2A-MRY1325

Dear Robert,

As directed by the Nunavut Water Board (the NWB or the Board) on September 23, 2024, the Qikiqtani Inuit Association (QIA) reviewed Baffinland Iron Mines Corporation's (Baffinland or the Applicant) Renewal Application for Water Licence No: 2AM-MRY1325 (the Application) (the Licence). Enclosed please find QIA's technical review comments in Appendix A.

During the course of its technical review, QIA identified technical comments concerning the following issues:

- Adaptive management;
- Closure and reclamation;
- Compliance with Environmental Assessment predictions;
- Applicability of the *Metal and Diamond Mining Effluent Regulations*;
- Water quality modelling;
- Aquatic monitoring methodology and results;
- Dust suppression;
- Water management infrastructure operation and maintenance procedures;
- Inuit engagement;
- Cumulative effects;
- Incorporation of Inuit Qaujimajatuqangit;
- Inuit indicators and measures;
- Management of impacts of water withdrawal;
- Inuit engagement;
- Inuit water use and rights, and



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- Impacts on fish habitat.

Within the technical comments, QIA has made several recommendations to the NWB should the Board decide to grant the renewal water licence. These recommendations can be found in technical comments Nos. **QIA-TR-13, QIA-TR-14, QIA-TR-29, QIA-TR-30, QIA-TR-31, QIA-TR-32, QIA-TR-33, QIA-TR-34, QIA-TR-35, QIA-TR-36, QIA-TR-37, and QIA-TR-38.**

QIA also reiterates in technical comments Nos. **QIA-TR-3** and **QIA-TR-26** the requests for clarification to Environment and Climate Change Canada (ECCC) and Fisheries and Oceans Canada (DFO), respectively. It is understood that the NWB directed both ECCC and DFO to provide the requested clarifications on or before October 23, 2024.

QIA is pleased to provide the Board with its Tusaqtavut studies in support of its comments. The Tusaqtavut studies result from the interviews conducted with 137 Inuit from the communities currently impacted by the Mary River Project (the Project). Community members from Pond Inlet, Igloolik, Sanirajak, Arctic Bay, and Clyde River provided “traditional knowledge around traditional resources and the Inuit way of life surrounding the Mary River Project and the potential impacts of the Mary River Mine Project Phase 2, identified by members in the impacted communities.” From earlier Baffinland submissions, QIA observes that, in relation to the Tusaqtavut studies, the Applicant stated that currently employed mitigation measures were not taken into account. However, the Tusaqtavut studies describe impacts that Inuit have been experiencing despite Baffinland’s mitigation measures. As such, the Tusaqtavut studies should be interpreted as evidence of the need for improvement to Baffinland’s mitigation measures and that effects experienced by Inuit have surpassed those predicted by Baffinland in their previous assessments.

QIA would like to thank the NWB for the continued opportunity to participate in the review of this Application. Please do not hesitate to contact QIA for any clarification.

Nakurmiik,

Assol Kubeisnova

Manager of Regulatory Review

Qikiqtani Inuit Association

Appendix A QIA Technical Review Comments

Comment Number	QIA-TR-1
Issue	Compliance with Environmental Assessment predictions over licenced period
Reference	<p>Appendix I Baffinland's Response to QIA's Comments on Draft Application, Appendix B Supplementary Information Guideline (SIG) Form; Section: 12-1; Page: 4</p> <p>2AM-MRY1325 Type A Water Licence Renewal Application Information Request Responses, QIA-4, QIA-5</p> <p>240916 2AM-MRY1325 Attachment 1 - Water Licence Water Quality Monitoring Results 2013-2023-ILAE</p> <p>240916 2AM-MRY1325 Attachment 2 - Status of Management Plans Required under Type A WL-ILAE</p>
Discussion	<p>A key feature of the Nunavut water licence is to functionally constrain project effects to those predicted and agreed upon in the project certificate. Management plans are refined during the water licensing process, a process which iteratively continues following reviews of monitoring data every year or so.</p> <p>QIA has highlighted in our completeness check on both Baffinland's draft and formal water licence application to the NWB (QIA-4), and in our review of Baffinland's responses to QIA on August 15, 2024 that a summary of historical data is required to demonstrate compliance with the licence terms and conditions as well as the predictions outlined in the environmental assessment for the project over the entire period of record under which the Mary River Project has operated.</p> <p>Baffinland initially provided a summary of monitoring data collected over the 2023 monitoring year, and subsequently the raw data over the entire period of record (2013-2023) from all monitoring stations. Neither dataset provides the necessary context nor is it accompanied by any interpretation to permit stakeholders to evaluate whether the management plans have effectively constrained effects.</p> <p>Baffinland's responses to QIA's information request (QIA-5) also included a summary of the "Status of Management Plans Required under Type A WL-ILAE". This document was provided in response to QIA's request that management plans required under the Type A water licence be updated based on the outcomes of the monitoring data review. Baffinland's submission outlines the versions of the plans, and which are currently being revised with the public via the NWB and NIRB annual report processes. This submission does not demonstrate if the plans have been updated to consider all operating data through to the water licence renewal submission.</p>
Recommendation	<p>a. We request Baffinland all aquatic monitoring data collected while the Project has operated to demonstrate how actual monitoring conditions have remained</p>

Comment Number	QIA-TR-1
Issue	Compliance with Environmental Assessment predictions over licenced period
	<p>within or exceeded environmental assessment predictions. This analysis should include seasonally specific summaries (e.g., median values and percentiles) throughout the receiving environment akin to an annual report using all data provided in “240916 2AM-MRY1325 Attachment 1 - Water Licence Water Quality Monitoring Results 2013-2023-ILAE”. Further, the analyses should include trend analyses to provide confidence for reviewers that conditions are not trending up over time (and may either exceed environmental assessment predictions in the future, or further exceed environmental assessment predictions). The results should be compared with area specific environmental predictions presented in the Environmental Assessment.</p> <p>b. Upon completion of this requested analysis, Baffinland should update plans that are intended to manage environmental effects pathways that have exceeded environmental assessment predictions.</p> <p>The provision of this analysis and updated plans that have not effectively constrained environmental effects as outlined in the environmental assessment must be accomplished during this licensing process with sufficient time for review by the parties.</p>

Comment Number	QIA-TR-2
Issue	Adaptive Management and the <i>Surface Water and Aquatic Ecosystems Management Plan (SWAEMP)</i>
Reference	2AM-MRY1325 Type A Water Licence Renewal Application Information Request Responses, QIA-7
Discussion	<p>QIA has highlighted concerns with the adaptive management components (Trigger Action Response Plan, TARP) of several management plans required under the water licence, including but not limited to the SWAEMP. Specifically, QIA highlighted both in QIA-7 and our comments issued during the annual report review that the reliance on “professional judgment” in the TARP introduced significant uncertainty and subjectivity in how exceedances of triggers would be evaluated, and that professional judgment was used in multiple cases (see QIA submission to NWB - QIA 2023 NWB AEMP#3, QIA 2023 NWB CREMP#9, QIA 2023 NWB CREMP#15) to conclude that an observed effect was not attributed to the project.</p> <p>QIA appreciated Baffinland’s response to QIA-7 indicating that “supporting rationale for any positions taken based on professional judgment should be clearly stated as part of the adaptive management process” and that “Baffinland is prepared to develop a general decision tree to justify decisions based on professional judgment, which could be</p>

Comment Number	QIA-TR-2
Issue	Adaptive Management and the <i>Surface Water and Aquatic Ecosystems Management Plan (SWAEMP)</i>
	<p>appended to the Adaptive Management Plan and apply across Baffinland's Environmental Management System".</p> <p>However, Baffinland has suggested that "this process would likely involve several steps, including defining the decision context, identifying possible outcomes, and using a structured approach to evaluate the alternatives. This will be discussed further with QIA at the next meeting of the Adaptive Management Plan Working Group."</p> <p>However, these NWB proceedings are an appropriate venue to clarify how adaptive management will be implemented for the project, and to better ensure it is implemented to the satisfaction of all parties under a renewed water licence.</p> <p>We note that an adaptive management discussion is particularly relevant here as potential responses may require alterations to the licence, and it is preferred to identify those potentialities during the licensing process.</p> <p>QIA agrees with the Applicant's reasoning that "a general decision tree to justify decisions based on professional judgment" ought to be included in an adaptive management plan for the Project; however, as the SWAEMP is one of the core plans for the Project, it is necessary for effective operations and management of the aquatic ecosystem for the SWAEMP to contain the TARP and the decision tree outlining the flow of professional judgement.</p>
Recommendation	QIA requests that Baffinland prepare an initial TARP decision tree pertaining to decisions based on professional judgement as part of these proceedings.

Comment Number	QIA-TR-3
Issue	Applicability of the <i>Metal and Diamond Mining Effluent Regulations (MDMER)</i>
Reference	2AM-MRY1325 Type A Water Licence Renewal Application Information Request Responses, QIA-9
Discussion	<p>QIA disagrees with Baffinland's interpretation of the MDMER and its application to Steensby and Milne ports outlined in their response to QIA-9:</p> <p><i>Steensby Port and Milne Port are not used to produce iron ore, nor are they adjacent to a Mary River Mine work or undertaking that produces iron ore. Steensby Port and Milne Port, including associated infrastructure such as stockpiles, are transportation works or undertakings, not production works or undertakings. MDMER has not applied to Milne Port since ore began moving through the area for commercial purposes in 2014, which supports Baffinland's</i></p>

Comment Number	QIA-TR-3
Issue	Applicability of the <i>Metal and Diamond Mining Effluent Regulations</i> (MDMER)
	<p><i>above interpretation. Similarly, MDMER do not apply to areas of other ports in Canada where mined materials are stockpiled and shipped overseas (for example the Port of Vancouver).</i></p> <p>Baffinland’s stated rationale overlooks the intent of the MDMER which is to regulate and manage mining activities, particularly those through which effluent is generated. Baffinland has applied for both project certificates and water licences for all components (Mine Site, Milne Port and Steensby Port), and all components are considered necessary to the project. A greater volume of ore is stockpiled at Milne Port than at the mine site, and a resulting greater volume of water coming into contact with that ore is therefore generated. Hence, the port facility and stockpiles are still central components of the mine itself.</p> <p>We note that Baffinland’s example of the Port of Vancouver is not an applicable comparison as that facility is not operated under the same licences as the mining projects which use it to ship their ore. As contemplated by the MDMER definition of “metal mine”, the regulations apply to undertakings (such as Milne and Steensby Ports) which have been “designed” or “used” connection with activities for the production of ore. Milne and Steensby Ports were both designed specifically for, and are integral to, the production of ore at the Mine Site. They are integral parts of the mine.</p> <p>QIA is concerned that a failure to consider the entire project together when evaluating the applicability of the MDMER disregards the central fact that the port and mine sites are operated under the same water licence.</p> <p>QIA suggests that it is appropriate to apply the MDMER to discharges to the marine environment of water from the port site(s) that have been in contact with stockpiled ore, including minimum discharge standards, environmental effects monitoring, effluent and water quality monitoring studies, and biological monitoring to improve the characterization of direct and indirect (primarily dust) mine related impacts proximal to Milne Port (and later Steensby Port).</p>
Recommendation	QIA would like to request Environment and Climate Change Canada’s judgement on whether discharges to the marine environment from the Milne Port management ponds of surface water that has come into contact with the processed ore are subject to the <i>Metal and Diamond Mining Effluent Regulations</i> .

Comment Number	QIA-TR-4
Issue	Waste Rock Facility water quality model
Reference	Appendix I Baffinland’s Response to QIA’s Comments on Draft Application;

Comment Number	QIA-TR-4
Issue	Waste Rock Facility water quality model
	<p>Appendix A4 2023 Water Quality Model Update, Waste Rock Facility Report;</p> <p>Appendix L3 – Surface Water and Aquatic Ecosystem Management Plan, Section: 12-3, Page: 5</p> <p>2AM-MRY1325 Type A Water Licence Renewal Application Information Request Responses, QIA-6</p>
Discussion	<p>Baffinland plans to continue operating the Waste Rock Facility (WRF) following the same practices and procedures to those currently implemented under the existing licence as evidenced by their position that the 2023 WRF model update was sufficient to update the <i>Phase 1 Waste Rock Management Plan</i> (BAF-PH1-830-P16-0029, Rev 4, March 2024) which is the current version used on site.</p> <p>The licence renewal application however necessitates a consideration of whether key mine infrastructure, including the WRF, can be operated throughout the requested licence period in such a way that both constrains environmental interactions to those predicted in the environmental assessment during the life of the mine and facilitates a transition to closure and post-closure that does not incur residual environmental liabilities.</p> <p>It is for this reason QIA has asked Baffinland to update the WRF water quality model (QIA-6) both in consideration of climate change (namely the RCP 8.5 ICPP scenario) and the 6 Mtpa deposition rate.</p> <p>Baffinland has indicated they will be “<i>providing a schedule for future updates to the water quality model by November 1, 2024 as part of the ongoing and parallel process to update the Interim Closure & Reclamation Plan.</i>” QIA is concerned that a schedule for future updates may not include an actual update to the model to address the scenario (i.e., 6 Mtpa and with consideration of current climate change models), precluding an understanding of whether the existing <i>Waste Rock Management Plan</i> and associated <i>Surface Water and Aquatic Ecosystem Management Plan</i> are appropriate to the activities and ambient conditions expected during the requested the licence duration.</p> <p>QIA understands that the Nunavut Impact Review Board’s review of Sustaining Operations Proposal 2 was suspended. QIA notes that Baffinland may request to commence the review within three years of suspension, which is within this licence renewal period.</p>
Recommendation	QIA recommends Baffinland include a WRF model update by November 1, 2024 to include all discharges and interactions with the aquatic environment, incorporating updated baseline data (relative to the existing licence and incorporating reference data), climate change predictions extending through and past the requested licence duration

Comment Number	QIA-TR-4
Issue	Waste Rock Facility water quality model
	<p>(using RCP 8.5) and includes model validation using project data collected over the previous water licence period (analyzed, as opposed to the raw data presented in 240916 2AM-MRY1325 Attachment 1 - Water Licence Water Quality Monitoring Results 2013-2023-ILAE). Providing the model update by this deadline will allow QIA to review it in time for the NWB Technical Meeting.</p> <p>QIA emphasizes that this model update must be completed as part of these proceedings and not as a condition of the licence to provide stakeholders and the Board confidence the waste rock facility can be operated with environmental interactions consistent with the environmental assessment and will not incur long-term environmental liabilities.</p>

Comment Number	QIA-TR-5
Issue	Water withdrawal restrictions
Reference	<p>Appendix L4 FWSSWMP, Section: Table 3 Water Use Authorized for Dust Suppression Along the Tote Road, Page: 1of 5 P13</p> <p>Document Name: 2AM-MRY1325 Type A Water Licence Renewal Application Information Request Responses, QIA-8</p>
Discussion	<p>Baffinland's August 15, 2024 response to QIA-8 indicates there are two types of water withdrawal locations: "water withdrawal sites with restrictions" and large locations where temporal withdrawal restrictions are not applicable (Water Licence Table 2-3 Water Use Authorized for Dust Suppression). Baffinland has had periodic problems constraining the water withdrawal for dust suppression to the limits outlined in the water licence. QIA is concerned that these failures may impact aquatic habitat if the periodic exceedances occur in small watercourses with more limited withdrawal limits (e.g., CV099, CV087, CV078).</p> <p>QIA further notes that these more limited volume water withdrawal locations are not always required – these locations were not used in 2023.</p> <p>QIA further agrees with Baffinland "that the observed and projected changes in polar regions is an increase in river runoff due to increased precipitation (Intergovernmental Panel on Climate Change, 2022, Cross-Chapter Paper 6: Polar Regions)" (Baffinland's August 15, 2024 response to QIA-8) but notes that the projected effects of climate change also include additional variability in precipitation and snowpack, and flashier precipitation events that may be significant in volume but short in duration. Collectively this suggests that reliance on mean flows to implement restrictions may not provide sufficient protection to aquatic habitat.</p>

Comment Number	QIA-TR-5
Issue	Water withdrawal restrictions
Recommendation	Acknowledging Baffinland’s desire to maintain “flexibility to support optimal environmental management, specifically as it relates to dust management and control” (Baffinland’s September 10, 2024 response to QIA-8), QIA recommends water withdrawal locations with seasonal restrictions be afforded additional protection, and that Table 2-3 of the water licence be amended to redefine “low flow” conditions as less than 75 th percentile flows, a change from the “less than mean flow” currently in the body of the licence.

Comment Number	QIA-TR-6
Issue	Management plans to protect fish and fish habitat during water withdrawals
Reference	Water Withdrawal Notification and Hydrological Assessment – Steensby Component, Section: Section 5.2 Relevant Management Plans, Page: 29/41 P37
Discussion	<p>Baffinland describes comprehensive environmental management plans and monitoring programs to manage the effects of the Mary River Project. Baffinland goes on to state that it “intends to apply its experience and the existing management plans and monitoring programs to manage the construction and operation of the Steensby Railway, in addition to developing additional measures as required to address site-specific issues.”</p> <p>While QIA understands the need to maximize efficiency in preparing management plans and monitoring programs, nonetheless, site-specific plans should be developed to account for different conditions at the proposed crossings.</p> <p>Several mitigation measures are certainly applicable to numerous crossings and conditions including spill contingency plans and general environmental protection measures outlined in the Environmental Protection Plan; however, parameters such as gradient, flow, substrate and fish communities will differ and will require management techniques to be developed accordingly.</p> <p>In addition, none of the plans referred to in the document include measures specifically for the Steensby component.</p>
Recommendation	<p>Rather than referring to the plans, from which mitigation measures will be implemented, it would be useful for Baffinland to incorporate measures that are applicable specifically to water taking activities, even though several measures overlap with other activities.</p> <p>The plans could either be updated to include the Steensby component or developed separately as specific plans.</p>

Comment Number	QIA-TR-7
Issue	Suspension of data collection at hydrometric stations
Reference	Water Withdrawal Notification and Hydrological Assessment, Section: 4.2 Available Streamflow Data, Page: 17/41 P. 25
Discussion	<p>Section 4.2 states that the “hydrological assessment relies on streamflow data collected by Baffinland and the Water Survey of Canada (WSC) since 2006”. A hydrology baseline analysis for the Mary River Project was also completed in 2012. Baffinland has continued to operate only seven of these hydrometric stations since 2012.</p> <p>QIA questions why data collection was suspended on nine of the 16 stations. At least three of these discontinued stations provide context and are located along the Steensby railway and proposed winter road. These stations could have provided recent baseline information.</p>
Recommendation	In order to monitor changes, QIA recommends that Baffinland be required to reactivate these stations. If construction is delayed, the stations should be reactivated to continue with baseline data collection.

Comment Number	QIA-TR-8
Issue	Water withdrawal volumes during ice cover
Reference	Water Withdrawal Notification and Hydrological Assessment, Section: 4.5.1 Withdrawals During Ice Cover, Page:25/41 P. 33
Discussion	<p>Winter water withdrawal protocol states that drawing water from a single body of water must not exceed 10% of the available water under ice. This threshold is applicable to waterbodies, for which bathymetry is available. Most of the lakes, for which water withdrawal is proposed, have bathymetry available; however, one lake requires an extraction of a volume of water, for which bathymetry is not available. The document states that the proposed extraction volumes were related to the lake surface area and that it represents a drawdown of approximately 1.6 cm, yet no rationale or methodology is provided.</p> <p>DFO has developed a <i>Method for Determining Available Winter Water Volumes for Small-Scale Projects</i> (2020) that includes a water use estimate and field verification plans for lakes, for which bathymetry is not available.</p>
Recommendation	In order to provide rationale for the proposed extraction, QIA recommends that this methodology be employed for any lakes without bathymetry.

Comment Number	QIA-TR-9
Issue	Water withdrawal volumes during open water
Reference	Water Withdrawal Notification and Hydrological Assessment, Section: 4.5.2 Withdrawals During Open Water, Page: 27/41 P. 36
Discussion	<p>The report states that water can be withdrawn from a lake without further evaluation as long as the monthly withdrawal volume does not exceed 10% of the mean monthly outflow volume.</p> <p>For three of the four lakes that will be subject to increases in water withdrawals, the proposed withdrawal volumes did not exceed 10%. Ravn Camp Lake, however, will experience a flow reduction of 15% for the month of June. The report justifies this reduction by stating that the outflow typically begins only in the second half of the month and most of June flows occur over a shorter timeframe. The report goes on to state that the 5.6 cm reduction is within the range of natural variation and that the impact is unlikely to affect fish movement.</p> <p>In Section 4.5.1, a winter drawdown of 5.6 cm is identified for Ravn Camp Lake, which is determined to be minor. The migration of fish is recorded to occur until water temperature reaches 5-7°C at the end of June-early July. The reduction of an additional 15% has also been determined to have only minor impacts, yet no rationale is provided for this conclusion. In addition, with climate change, the 5-7°C temperature that precipitates fish movement will likely occur earlier in the month.</p>
Recommendation	QIA requests the provision of a robust rationale including methodology that will justify the volume of drawdown in the Ravn Camp Lake. This rationale should include a scenario where the threshold temperature for fish movement occurs earlier in the month than at present.

Comment Number	QIA-TR-10
Issue	Water withdrawal location with respect to Arctic Char spawning habitat
Reference	Water Withdrawal Notification and Hydrological Assessment, Section: 5.5 Entrainment in Pumps/Impingement on Screens, Page: 32/41 P. 40
Discussion	Baffinland describes mitigation measures to avoid entrainment and impingement of fish during the water withdrawal process. Baffinland also states that areas where critical Arctic Char spawning habitat is located will be avoided during their spawning period, between September 1 and June 30 and that a qualified professional will determine if water withdrawal is allowed at each proposed site during the critical timing window and based on the suitability of spawning habitat.

Comment Number	QIA-TR-10
Issue	Water withdrawal location with respect to Arctic Char spawning habitat
	QIA is concerned that knowledge of the presence of suitable spawning habitat will not be obtained until the time when Baffinland is ready to withdraw water. If this timing corresponds with spawning activity, a new location will need to be identified. QIA believes that a spawning habitat assessment conducted well in advance of water withdrawal would be more beneficial to the process and safer for spawning fish. The locations could be mapped during the preceding summer and confirmed just prior to the commencement of water withdrawal.
Recommendation	QIA recommends conducting a spawning habitat assessment to identify suitable habitat as a baseline. This activity would be similar to and can be conducted in conjunction with the <i>Steensby Port and Railway Freshwater Habitat Surveys (2021-2023)</i> for the stream crossings.

Comment Number	QIA-TR-11
Issue	Camp Lake water quality
Reference	QIA Completeness Check of Water Licence Renewal Application No: 2AM-MRY1325, WL Renewal IR #11 2AM-MRY1325 Type A Water Licence Renewal Application Information Request Responses, QIA-11
Discussion	We appreciate the clarification with respect to the full suite of parameters of potential concern (POPC) sampled through operation of the environmental monitoring programs. We have continuing concern that elevated concentrations in POPCs are derived from mine activities and would like to narrow down the specific cause of these values. We would like to know how the five parameters (arsenic, copper, iron, manganese, and phosphorus) found to have elevated concentrations compared to the AEMP/benchmark values compare with the elements associated with the ore body and/or tote road chemical composition.
Recommendation	How do the chosen parameters of potential concern (POPC) that demonstrate elevated concentrations compare with elements that are associated with the ore body?

Comment Number	QIA-TR-12
Issue	Dust suppression and water sources
Reference	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325, Section 5.3 - Page 19
Discussion	Baffinland states:

Comment Number	QIA-TR-12
Issue	Dust suppression and water sources
	<p><i>All of the sampling events that had a downstream TSS concentration greater than the screening criteria occurred during the June 12 to June 19, 2023 period when freshet conditions resulted in elevated sediment loading into the affected watercourses over a short period of time and suggest the potential for Project-related change in water quality.</i></p> <p>It is agreed that the exceedances in total suspended solids (TSS) are for a short period of time, but these are due to ineffective mitigation measures at these locations.</p>
Recommendation	Spring freshet periods will be the driver for the majority of seasonal sediment and erosion control issues, therefore, QIA recommends developing and implementing more robust sediment and erosion control measures for these periods of high runoff and meltwater flows.

Comment Number	QIA-TR-13
Issue	NIRB site visit findings
Reference	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325, Section 5.3 - Page 22
Discussion	<p>The document states:</p> <p><i>Baffinland appears to have a well-maintained site including adequate environmental protection measures and procedures in place as per the Project Certificate and their Management Plans. Baffinland is conducting trials to explore alternative options for dust suppression and mitigation.</i></p> <p>QIA conducts regular site visits and would like to note that the NIRB was likely on site during a period of ground freeze and snow cover, when issues related to sedimentation and elevated water levels was not occurring due to winter conditions.</p>
Recommendation	QIA brings it to the Board's attention that site visit observations are more representative when made during periods of snowmelt and spring freshet conditions.

Comment Number	QIA-TR-14
Issue	Lake sampling
Reference	APPENDIX L11 Sampling Program - Quality Assurance and Quality Control Plan, Section 5.2.2 - Page 14
Discussion	The document states:

Comment Number	QIA-TR-14
Issue	Lake sampling
	<p><i>For monitoring of sediment character and quality in lakes, a depth sampler will be used. The preferred sample apparatus for lake sediment samples are gravity percussion corers, since they allow for retrieval and analysis of sediment profiles. A Petite Ponar can also be used but will not provide sediment profiles. Generally, forms of gravity percussion corers consist of a clear polycarbonate sample core tube attached to a weighted upper head assembly and a seal mechanism. The top two centimeters of sediment from the core samples will be retained for laboratory analysis unless sampling objectives state otherwise.</i></p> <p>Baffinland is correct in stating the preferred device for collecting a lake sediment core is a gravity corer compared to a Petite Ponar because a gravity corer will preserve the sediment profile. Lake sediment cores have long been used to reconstruct baseline (pre-industrial) conditions, which may allow for timing and cause(s) of environmental change to be identified. The current standard operating procedures in the CREMP states for only the top 2 cm to be retained while the remaining sediment is discarded. Sedimentation accumulation and sedimentation rates were reported previously by Baffinland Iron Mines. Rough estimates suggest 2 cm may only represent a period of ~20 years, which will vary on a lake-by-lake basis. However, ~20 years extends barely past the start of mining operations. A 2-cm sample is likely integrating sediment deposited before and after the start of mining operations, which may mask the enrichment of substances of concern due to mining operations and activities. As referred to numerous times in water licence application, background concentrations of substances of concern may be elevated naturally because of the geological deposit and may naturally exceed sediment quality guidelines. For example, sediment metal concentrations at the top of the core may be above or below sediment quality guidelines but have increased potentially 5-fold above sediment that predates industrial activities in the region (i.e., the bottom of a full-length sediment core). This will provide a more rigorous method to develop site-specific baselines for substances of concern.</p>
Recommendation	<p>QIA recommends a one-time collection of full-length lake sediment cores (>50 cm) from lakes located close to the mining operations at Mary River Mine – Sailiivik Camp and reference lakes sites. The >50 cm sediment core will be sectioned into 1 cm or 0.5 cm intervals. Routine analysis of metal concentrations can be reported downcore to provide context to metals concentrations observed in surficial sediment. Ultimately, this will provide the most rigorous baseline (pre-mine) data possible on substances of concern to discern the relative roles of natural and anthropogenic activities. Combined with systematic water and surficial sediment sampling, these methods provide a powerful approach to track changes at a range of temporal and spatial scales relevant to inform environmental stewardship decisions.</p>

Comment Number	QIA-TR-15
Issue	Lake sampling
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L8-ILAE, Section 3.7.3. Sediment Quality, Page 47
Discussion	<p>The document states:</p> <p><i>Because greatest accumulation of depositing material occurs with the deep basin(s) of lakes, monitoring of sediment quality at profundal stations provides the optimal basis for temporal tracking of metals in sediment of the mine-exposed lakes. Sediment quality monitoring at lakes will occur at an annual frequency.</i></p> <p>QIA concurs. The profundal zones or deeper regions of a lake provide optimal basis for temporal tracking of sediment metal(loid) concentrations. However, critical to note, is within lake sediment depositional process. Sediment focusing occurs naturally within a lake due to energy gradients. Shallower regions of lakes are often associated with coarser sediment particle size, which will possess relatively low metal(loid) concentrations due to low surface area to mass ratio of sediment. Conversely, deep regions are associated with finer sediment particle size and higher metal(loid) concentrations due to higher surface to mass ratio. Thus, comparison between sediment samples with different grain size may undermine temporal analyses and mask a signal of enrichment due to industrial operations.</p>
Recommendation	QIA recommends Baffinland continue sampling surficial sediment consistently from the deepest regions or profundal zone of lakes. Additionally, grain size of the sediment should be considered when evaluating for temporal or spatial trends. A common technique used to account for varying grain size is geochemical normalization.

Comment Number	QIA-TR-16
Issue	KM105 Pond management
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L4-1of5-ILAE, Section 7.2.5 – page 31 of pdf
Discussion	<p>The document states: “Regular geotechnical inspections will also be conducted, along with the removal of accumulated sediment in the pond as required.”</p> <p>It is important to have a record of the specific, measured quantity of sediment accumulation that results in cleanout of the KM105 pond. It would be valuable for records of these measurements and cleanout frequency (and cleanout volumes) to be shared to</p>

Comment Number	QIA-TR-16
Issue	KM105 Pond management
	ensure that frequent and reasonable maintenance of stormwater/drainage infrastructure has been occurring.
Recommendation	<p>Please clarify what is measured to determine “sufficient sediment accumulation” for removal in the fall. This response appears ambiguous – is sediment cleaned out once it reaches a predetermined storage level or only done in the fall?</p> <p>QIA notes that in 3 years of fall site visits (2022 – 2024) there have not observed or documented any signs of pond cleanouts occurring. QIA recommends that Baffinland share records of these cleanouts for review.</p>

Comment Number	QIA-TR-17
Issue	CREMP early detections of mine water quality influence
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-1Application&Supporting-Info-ILAE, Section 5.1, pg. 11 of 19
Discussion	<p>This issue was discussed in QIA’s completeness check Information Request WL Renewal IR #13. During the 2023 CREMP monitoring program, mine-related influences on water quality was detected in tributaries to Camp Lake (Minnow Environmental, 2024). At Camp Lake, no AEMP water quality benchmarks were exceeded in 2023 and no mine-related influences on water quality were indicated.</p> <p>Additional trend analysis and benthic macroinvertebrate monitoring is a good step in quantifying the impacts of the change in POPC contribution/accumulation at CLT1.</p> <p>The response to this question appears to be deferring adaptive management actions to mine operations and targeted causal investigations because the increased concentrations of POPCs has not caused significant changes to benthic macroinvertebrate communities. In short, it appears that targeted causal investigations are being deferred because the POPCs are being diluted, which is not a good reason to defer adaptive management practices.</p> <p>It is a positive sign that the CREMP appears to indicate that the detection of mine influence on water quality at CLT1 has occurred before significant effects are expressed in aquatic biota, as it gives Baffinland an opportunity to take corrective actions before aquatic biota are impacted by the changes in water quality.</p>
Recommendation	QIA recommends that a detailed investigation into the pathway of effects that are causing this change in water quality be done and remediation measures be conducted to prevent further elevation of concentrations of POPC before there is any negative effect to the aquatic biota in the receiving environment.

Comment Number	QIA-TR-18
Issue	Monitoring Phillips Creek and KM 32 Lake water quality
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-1Application&Supporting-Info-ILAE, Section 5.2, pg. 11 of 19
Discussion	<p>The document states:</p> <p><i>Phillips Creek runs parallel to the northern 60 km of the Milne Inlet Tote Road and is adjacent to Milne Port. It is a potential summer water source for Milne Port. However, it has not been used to date. Km 32 Lake is the main water source for Milne Port. It is part of the Phillips Creek catchment. Monitoring of water quality in either waterbodies is not required by the Licence.</i></p> <p>Water carried by Phillips Creek represents an integrated sample of water leaving the freshwater environment and entering the marine environment. Notably, it is positioned adjacent to the Tote Road and Milne Port. Phillips Creek could serve as a key monitoring location for water quality given the concerns of dust blowing off the Tote Road and at Milne Port. Additionally, water quality monitoring here may provide further insight into the footprint of mining operations of the landscape.</p>
Recommendation	QIA recommends Baffinland consider systematic water quality sampling of Phillips Creek and Km 32 lake despite not being required under the current Licence.

Comment Number	QIA-TR-19
Issue	Project-related changes in TSS
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-1Application&Supporting-Info-ILAE, Section 5.3, pg. 11 of 19
Discussion	<p>The document states:</p> <p><i>A potential Project related change is defined as a greater than 50 mg/L increase in TSS concentrations in the downstream sample when upstream concentrations are less than 250 mg/L. When concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in TSS concentrations in the downstream sample.</i></p> <p>The derivation of these values used to define a project-related change are unclear. A change of 50 mg/L in TSS concentrations can be a very large change relative to a pristine existing environment.</p>
Recommendation	QIA recommends that the approach on distinguishing Project-related changes in TSS be based on pre-development to post-development water quality data to make detecting

Comment Number	QIA-TR-19
Issue	Project-related changes in TSS
	potential changes in water quality more sensitive to catch potential issues before significant effects on aquatic habitat can occur.

Comment Number	QIA-TR-20
Issue	Flow path visualization
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L3-ILAE, Figure 2 – Mine Site Drainage and Water Licence Monitoring Locations
Discussion	Locations of drainage ditches and runoff conveyance infrastructure are not clear on this figure, as only overland flow paths are marked with small arrows
Recommendation	QIA recommends revising to show drainage ditch and flow directions to help contextualize the placement of water sample/monitoring locations.

Comment Number	QIA-TR-21
Issue	Reference watercourse for monitoring reporting
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L4-1of5-ILAE, Section 7.1, pg. 26 of 69.
Discussion	<p>The document states:</p> <p><i>Additional parameters including sub-lethal toxicity, aluminum, cadmium, iron, mercury, molybdenum, selenium, nitrate, ammonia, chloride, chromium, cobalt, sulphate, thallium, uranium, phosphorus, manganese, hardness, alkalinity and specific conductance are also required under MDMER, however these parameters do not have a maximum water quality discharge limit but instead are used to provide additional information to assist in interpreting toxicity results and identifying potential effects on the receiving environment.</i></p> <p>Parameters without maximum water quality discharge limits provide an avenue of project-related environmental risk since the data are not actively contextualized within the local environmental conditions.</p>
Recommendation	QIA requests that Baffinland clarify if data from monitoring locations are compared to the long-term averages from a reference location (watercourse).

Comment Number	QIA-TR-22
Issue	Reclamation of WRF
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L10-ILAE, Table 1.1, pg. 15 of 386.
Discussion	<p>Baffinland states: “The Waste Rock Stockpile will be progressively reclaimed during mining by placement of a 25 m thick cover of non-PAG [non-potentially acid generating] rock over PAG [potentially acid generating] rock.”</p> <p>The intent of this practice is likely to have the overlying NPAG [non-potentially acid generating] layer become integrated with local permafrost to prevent infiltration and/or groundwater from contacting and causing acid-generation with the PAG material. It is unclear how long it will take for the permafrost to become established and how that time period has been integrated into progressive reclamation plans for PAG deposition.</p>
Recommendation	<ol style="list-style-type: none"> Please clearly describe how long it is anticipated to take for the permafrost layer to become established over the PAG storage area to prevent acid-generation. Will this result in the PAG being separated from potential groundwater contact? What are the specifics surrounding prevention of acid generation? How does this option compare with sub-aqueous deposition of PAG material (potentially in the filled in-pit lake) in terms of long-term potential for acid generation?

Comment Number	QIA-TR-23
Issue	Research project findings
Reference	240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L10-ILAE, Appendix D – Reclamation Research Plans
Discussion	Reclamation research plans provide a good opportunity to leverage mine activities to learn more about how current and future practices can be updated to lower environmental effects of mining and reclamation. It is unclear how Baffinland will publicly share and publish the results of this research, so that the public and QIA can leverage the findings to improve future practices.
Recommendation	QIA recommends that Baffinland commit to sharing the findings of the research activities for QIA and NWB comment and review, before eventually publishing the results in a publicly accessible manner.

Comment Number	QIA-TR-24
Issue	Inuit engagement
Reference	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325 Appendix I – Baffinland’s Response to QIA’s Comments on Draft Application Cover letter.
Discussion	<p>In its completeness check Information Request WL Renewal #16, QIA requested:</p> <p><i>... a detailed record of Baffinland's recent engagement with Inuit about freshwater use (e.g., from 2015 to present), including a list of Inuit concerns related to water and Baffinland's plans to address those concerns, for both the Steensby component and current operations. QIA requires more information on the form of the meeting; how long the meeting lasted; what was presented at the meeting; how feedback was sought; what feedback was received; and how this feedback has been acted on.</i></p> <p>Baffinland provided its response on September 10, 2024 stating:</p> <p><i>Regarding QIA's comment on Baffinland's "adherence to requirements set by non-Inuit agencies and organizations that do not consider Inuit use, objectives, or measures," Baffinland would like to clarify that this pertains specifically to compliance with the Fisheries Act, as administered by the Department of Fisheries and Oceans (DFO). It is important to note that the Government of Canada has implemented the Inuit Nunangat Policy, which mandates that all federal departments and agencies, including DFO, incorporate Inuit perspectives and needs into the development of policies and programs.</i></p>
Recommendation	QIA would like to re-iterate its request to Fisheries and Oceans Canada (DFO) to clarify whether it agrees with the Applicant’s September 10, 2024 response to this comment regarding the consideration of the <i>Fisheries Act</i> of Inuit use, objectives and measures in relation to this Project.

Comment Number	QIA-TR-25
Issue	Future Operating Plans
Reference	General
Discussion	QIA seeks Baffinland’s confirmation on the intended future use of the planned railway which will connect Steensby Port to the mine site (“Steensby Railway”), in terms of shipping fuel or other supplies to the mine. It’s important to understand the intended use of shipping along the rail, as this will necessitate specific design considerations and emergency response plans to safeguard freshwater.
Recommendation	QIA requests that Baffinland confirm the entirety of the future use of the railway.

Comment Number	QIA-TR-26
Issue	Rail car design
Reference	General
Discussion	It is important to understand the types of rail cars that will be used (i.e., covered or uncovered hoppers) on the Steensby Railway. If hoppers are uncovered, additional considerations around dust control are imperative (i.e. spray and re-spray facilities along the route). Dust control is of utmost importance for the surrounding environment including freshwater and communities.
Recommendation	QIA requests Baffinland provide details on the rail cars that are intended to be used to transport ore, with consideration as to how activities like spraying for dust control will be done in colder months.

Comment Number	QIA-TR-27
Issue	Cumulative effects
Reference	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325, Appendix A – Application for Water Licence Renewal Nunavut Impact Review Board Cumulative Effects Assessment Framework Workshop Report In relation to Baffinland Iron Mines Corporation’s Mary River Project, April 2024
Discussion	QIA echoes the discussion of the importance of cumulative effects assessment in its completeness check Information Request WL Renewal IR #20: <i>Cumulative assessment is essential to provide an accurate picture of current and evolving conditions to Inuit water rights from the project and other processes. The forthcoming required cumulative effects assessment under the NIRB may be useful here. Better understanding of total cumulative effects loading should be required before making decisions on whether the terms of the current water licence and the proposed extension period are adequately protective of water.</i>
Recommendation	QIA re-iterates its recommendation to the Nunavut Water Board that, should this water licence application be approved, the NWB provide a mechanism for the future integration of the results of the forthcoming and NIRB-overseen cumulative effects assessment, when those results are available.

Comment Number	QIA-TR-28
Issue	Inuit Engagement on monitoring and the Adaptive Management Plan (AMP)
Reference	240815 2AM-MRY1325 BIM Ltr to NWB re WL Renewal Comments-ILAE
Discussion	<p>Baffinland’s application does not contain adequate assurance that Inuit perspectives are accounted for in project-related monitoring of, and adaptive management responses to, freshwater impacts. In their letter to the NWB dated August 15, 2024, Baffinland’s response to QIA IR #17 states that “The QIA has assumed the role of leading the development of Inuit based objectives, indicators, thresholds and responses (OITR's) for freshwater valued components including dust (i.e. TSS) and Arctic char” (9). They note that “this commitment is reflected in Project Certificate 005, Amendment No. 005, Appendix B, Table 1, Commitment #018, and QIA's responsibility towards Inuit OITR's has been further clarified through the Baffinland-QIA Adaptive Management Plan (AMP) Working Group and the development of an associated AMP Work Plan. Baffinland looks forward to advancing the work of the AMPWG and reviewing the Inuit OITR's as they are developed, agreed to and integrated into environmental management plans, as required” (9).</p> <p>However, NIRB Project Certificate 005 Commitment #018 contains no mention of freshwater specifically, and no concrete requirement that Inuit Objectives, Indicators, Thresholds and Responses be integrated into project monitoring and adaptive management. Scientific indicators and thresholds do not necessarily reflect Inuit perspectives on freshwater quality and related impacts and, as such, should not be used alone. If Inuit perspectives are not accounted for in this regard, impacts to Inuit freshwater use and rights cannot be accurately measured.</p> <p>QIA would like to ensure that stronger consideration of Inuit Qaujimajatuqangit be required as part of all adaptive management responses related to freshwater.</p> <p>QIA welcomes the newly indicated interest from Baffinland to review the Project management plans. The Adaptive Management Plan is especially important due to it being an overarching plan in relation to others. QIA strongly believes in the necessity to reinvigorate the discussion on the AMP.</p> <p>QIA is committed to keeping the NWB informed on its engagement with the applicant toward developing the AMP and adaptive management measures.</p>
Recommendation	QIA recommends, in the event that the Board grants the Application, the NWB include a licence condition the requirement that, contingent upon QIA’s development of Inuit Objectives, Indicators, Thresholds and Responses (OITRs), Baffinland integrate the Inuit OITRs into the Project’s water monitoring and adaptive management mechanisms,

Comment Number	QIA-TR-28
Issue	Inuit Engagement on monitoring and the Adaptive Management Plan (AMP)
	including the Adaptive Management Plan (AMP) itself, in a way that accurately reflects and accounts for Inuit perspectives on water quality, use, and rights.

Comment Number	QIA-TR-29
Issue	Inuit Qaujimajatuqangit
Reference	<p>240923 2AM-MRY1325 Application & Technical Review OAJE.</p> <p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-A-ILAE. Application for Water Licence Renewal.</p> <p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-I-ILAE. Baffinland's Response to QIA's Comments on Draft Application.</p> <p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-J-ILAE. Waterbody Information Shared Through Available Inuit Knowledge.</p> <p>230706-QIA-Comments-NWB-2022-Annual-Report.</p> <p>240911 Attachment 2 - Hydrological Assessment of Water Withdrawals</p>
Discussion	<p>Significant gaps remain in the Application material regarding Inuit Qaujimajatuqangit and culture, resources, and land use (CRLU) related to freshwater. This information is necessary to inform Baffinland and the NWB's understanding of water values, locations, baseline conditions, and changes that have occurred over the past >10 years. Such information is required to adequately assess Project impacts to Inuit water use in the past 10 years of Project development, construction and operation. While much of this information already exists and should be considered in relation to this Application, some of it is forthcoming from QIA.</p> <p>The summary of Inuit Qaujimajatuqangit provided by Baffinland in Appendix J to this application provides some description of Inuit traditional use of water and freshwater fishing in the project-affected area. Unfortunately, the Application does not reflect the scale and importance of Inuit waterbodies in the Project-affected area and omits Inuit Qaujimajatuqangit and Inuit Qaujimaningit on recent impacts, especially considering that Baffinland has elsewhere acknowledged Inuit concerns about dust and other Project impacts to fresh water and fish. Importantly, Inuit observed that Project-related dust is a form of substantial contamination, and that this contamination spreads via air and is visibly present in snow at substantial distances from the project development area and released in pulses as winds blow, snow melts, and water flows across the landscape.</p> <p>Additionally, Appendix J is missing summative, synthesizing mapping or analysis. The report includes a mixture of different maps and information from past studies but</p>

Comment Number	QIA-TR-29
Issue	Inuit Qaujimajatuqangit
	<p>requires a summary (in map or table form) that synthesizes the information, showing the relative locations and importance of waterbodies used by Inuit. The report discusses locations only in the context of the study that identified them (and then generally in the context of a particular land use activity or resource). As a result, the document does not show the full extent of waterbodies of importance for Inuit or identify their relative proximity or overlap with the Project footprint or activities.</p> <p>The description of various important waterbodies provided in Appendix J seems to be contradicted in Section 3.4.2 'Inuit Use of Water Along Steensby Rail and Steensby Port' (of the Hydrological Assessment of Water Withdrawals). This Section 3.4.2. makes statements such as 'few camps were identified along the railway', or 'no waters of importance were identified' which seem to minimize the history of Inuit use of the Project area – which would have included the collection of freshwater for drinking, and, at certain sites, fishing. Inuit use of this area for fishing and water collection naturally occurs as parties travel through the area – a fact which existing data testify to (and which is described in Appendix J). These points of internal contradiction or inconsistency between Baffinland's various filings speak to the need for an effective synthesis or summary of key waterbodies.</p> <p>The Inuit Qaujimajatuqangit and Inuit Qaujimaningit evidence provided by Baffinland also does not deal with the central issue of the degree to which the Project has caused Inuit avoidance and barriers to access in areas in and around the project development area.</p> <p>Because the different data streams presented in Baffinland's summary are not analysed together, we do not get a map or analysis showing how all the different water courses around the Project Area are used for different purposes by Inuit. This information will be augmented by the forthcoming Pond Inlet Freshwater study from QIA, in which Pond Inlet community members alone identified hundreds of water values in the project area as a whole. This study will be published by QIA in the near future, and its results will be material to this NWB process.</p> <p>Additionally, QIA has made previous requests for Inuit Qaujimajatuqangit (e.g., in comments on Baffinland's annual reports to the NWB and QIA) on a number of topics. Requests on these topics are outstanding:</p> <ul style="list-style-type: none"> • Modifications of fish-bearing stream crossings; • Monitoring dust deposition and dust suppression; • Locations for and monitoring at SNP monitoring locations; • The Tote Road Monitoring Program; • Snow stockpile monitoring;

Comment Number	QIA-TR-29
Issue	Inuit Qaujimajatuqangit
	<ul style="list-style-type: none"> • Identification of waterbodies of heightened importance for additional monitoring and heightened management prescriptions, in the context of the exiting WL; • Natural sedimentation surveys; • Elements of the Aquatic Effects Monitoring Program; and • Implementation of the revegetation program.
Recommendation	<ol style="list-style-type: none"> 1. QIA requests Baffinland fully provide information on impact pathways from the Project on freshwater, fish, fish habitat and fishing. 2. QIA recommends, if the Board grants the Application, the NWB include a licence condition requiring the Applicant to integrate the information on Inuit Qaujimajatuqangit and Inuit Qaujimaningit detailing the full range of waterbodies of importance and project-related impacts to Inuit water rights and CRLU, into project works, mitigation measures, monitoring plans, and adaptive management plans.

Comment Number	QIA-TR-30
Issue	Steensby Baseline and Trend-over-Time Information Adequacy
Reference	<p>240910-BIM Ltr to NWB re QIA WL Renewal Comments_Final</p> <p>240916 2AM-MRY1325 Attachment 3 - Freshwater Environment Engagement Comments-ILAE</p> <p>240911 Attachment 2 - Hydrological Assessment of Water Withdrawals</p>
Discussion	<p>In its letter to NWB from Sept 10, Baffinland responds to QIA IR #2 stating that “As the start date of the Steensby Components remains unknown at this time, it does not make sense to collect or review additional baseline data until after the construction start date for those components is known with more precision” (3). However, if Baffinland is committed to building the Steensby portion of the Project, or even if it is possibly going to build the Steensby portion of the Project, implementing advance baseline and trend-over-time data collection programs is critical, and such programs need to be fully informed by both western science and Inuit Qaujimajatuqangit. The only reason not to collect such data would be in a scenario where Baffinland is committed to NOT build the Steensby portions; otherwise, the precautionary principle needs to be applied re: advance data collection.</p> <p>Although Baffinland commits to “engage with QIA regarding additional baseline information that will be collected by Baffinland in advance of proceeding with the Steensby Components” (ibid.), more detail is required about the timelines or requirements for collecting and integrating baseline information. Mechanisms are also</p>

Comment Number	QIA-TR-30
Issue	Steensby Baseline and Trend-over-Time Information Adequacy
	<p>required for how to address potential differences in baseline information between the now-dated original baseline studies conducted with the original Final Environmental Impact Statement (FEIS) 2012 and forthcoming baseline and trend-over-time studies.</p> <p>Likewise, Baffinland’s “Hydrological Assessment of Water Withdrawals” report contains a brief description “Inuit use of water along Steensby railway and Steensby port” (16). However, this information is based on studies that are now a decade old or more. To provide baseline information about Inuit water use in the Steensby area, more recent data about Inuit use is required. This information should be updated on a regular basis because Inuit use is dynamic and adaptive. Older data may not reflect current use. Section 3.0 ‘Community Engagement and Inuit Knowledge’ should properly include a discussion of the findings of community engagement and the Tusaqtavut Reports regarding the impacts of the existing Project activities on freshwater from the Inuit perspective. For example, the Tusaqtavut Reports included testimony from the impacted communities speaking to concerns around dust contamination of waterbodies, possible impacts to fish and reduced fishing success, and avoidance behaviours related to these concerns.</p> <p>Lastly, Baffinland’s proposed time schedule in section 24 of the Application presents no clear timeline of when Steensby construction is set to begin. If asking for a water licence that will cover construction of Steensby this needs to be updated to include a line for when Steensby construction is proposed to start and finish. This timeline should also be adequate to allow more information to be collected about IQ and impacts to Inuit water rights and CRLU related to water.</p> <p>QIA notes this technical review comment is related to the one relayed in QIA-TR-7.</p>
Recommendation	<ol style="list-style-type: none"> 1. QIA echoes its Information Request WL Renewal IR #2¹ and recommends, if the Board grants the Application, the NWB include a licence condition requiring the Applicant to complete the following: <ol style="list-style-type: none"> a. updating the aquatic monitoring plans, such as the AEMP, as requested to demonstrate how the existing freshwater baseline characterization of the Steensby Component along the rail corridor and at the port site will be validated and updated as soon as feasible such that collection of baseline data does not provide a barrier to progressing with construction activities; b. providing the freshwater baseline information associated with the Steensby Component, including Inuit use, Inuit Qaujimajatuqangit, and Inuit

¹ Assol Kubeisinova (QIA) to Robert Hunter (NWB), Re: QIA Follow-up on September 10 and 16, 2024 Applicant Completeness Check Response for Water Licence Renewal Application No: 2A-MRY1325, dated September 18, 2024

Comment Number	QIA-TR-30
Issue	Steensby Baseline and Trend-over-Time Information Adequacy
	<p>Qaujimaningit 180 days prior to the commencement of construction of the Steensby Component for Board review, and</p> <p>c. updating the relevant management plans to reflect this freshwater baseline information associated with the Steensby Component and providing these updated management plans for Board approval 90 days prior to the commencement of construction of the Steensby Component.</p> <p>In addition, the Applicant should be required to provide the trend-over-time monitoring along Steensby railway and Port prior to construction such that updated information on Inuit use and Inuit Qaujimajatuqangit is meaningfully considered. QIA notes that its technical review comment QIA-TR-30 relates to this recommendation in regard to the use of Inuit OITRs in baseline data collection alongside Western scientific measures, conditional upon QIA's development of those OITRs.</p> <p>2. QIA also requests that the Board include a licence condition requiring Baffinland provide a Steensby Component construction timeline that is adequate to allow more information to be collected about IQ and impacts to Inuit water rights and CRLU related to water no less than 90 days prior to construction.</p>

Comment Number	QIA-TR-31
Issue	Pond Inlet Freshwater IQ Study
Reference	<p>240910-BIM Ltr to NWB re QIA WL Renewal Comments_Final</p> <p>240916 2AM-MRY1325 Attachment 3 - Freshwater Environment Engagement Comments-ILAE</p>
Discussion	<p>Baffinland states that if the Pond Inlet Freshwater IQ Study</p> <p><i>... becomes available within a reasonable timeframe before the NWB public hearings, Baffinland will collaborate with QIA to review the report and develop a joint submission for the Board. This will include considerations how the outcomes should be interpreted by the Board, and how Baffinland plans to integrate those outcomes into its Environmental Management System, and any management plans requiring NWB approval, and what regulatory process that can follow.</i></p> <p>QIA expects that the water licence renewal application process will allow adequate opportunity to review the findings of the Pond Inlet Freshwater Study in advance of the</p>

Comment Number	QIA-TR-31
Issue	Pond Inlet Freshwater IQ Study
	public hearing. QIA reiterates its commitment to share this document with the NWB and Baffinland when it is completed.
Recommendation	QIA recommends that, should the Board grant this Application, a licence condition requiring the Applicant to incorporate the findings of the Pond Inlet Freshwater Study into its management plans and submit the plans for Board approval.

Comment Number	QIA-TR-32
Issue	AEMP, Waterbodies of Importance, and Inuit Objectives, Indicators, Thresholds, and Responses
Reference	<p>240910-BIM Ltr to NWB re QIA WL Renewal Comments_Final</p> <p>240916 2AM-MRY1325 Attachment 3 - Freshwater Environment Engagement Comments-ILAE</p> <p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-L8-ILAE</p> <p>QIA. 2022. Qikiqtani Inuit Association's Tusaqtavut Study Specific to Baffinland's Proposed Phase 2 of The Mary River Project For The Communities of Arctic Bay and Clyde River.</p>
Discussion	Baffinland's September 10 response to QIA comment 19 states that "The current AEMP (Rev.2), which is subject to continuing review and comment and NWB approval, includes a dedicated section 2.2 which explains IQ considered in the development of the revised AEMP. In terms of Inuit feedback, QIA is part of the process and is involved in the review of the AEMP." However, as of yet, the AEMP does not adequately incorporate Inuit Objectives, Indicators, Thresholds, and Responses (OITRs) or represent all potentially impacted water bodies of importance for Inuit (14). Without this information, the monitoring program cannot accurately reflect Inuit perspectives. Although information on these topics already exists, more is forthcoming from QIA through the Inuit Stewardship Plan and should be meaningfully considered in the AEMP once available.
Recommendation	QIA recommends that, should the Board grant this Application, a licence condition requiring the Applicant to jointly review and revise the AEMP with QIA to meaningfully integrate Inuit OITRs, including specific monitoring plans for locations identified by Inuit as waterbodies of heightened importance, when available from QIA, and submit the revised AEMP to the NWB for Board approval with evidence of advance QIA engagement on proposed revisions to the AEMP. QIA recommends that the condition require this work to be done within six months of provision of Inuit OITRs by QIA. The condition

Comment Number	QIA-TR-32
Issue	AEMP, Waterbodies of Importance, and Inuit Objectives, Indicators, Thresholds, and Responses
	should include clear mechanisms, through which Inuit-led monitoring results and responses are integrated into adaptive management practices and decisions.

Comment Number	QIA-TR-33
Issue	Water Monitoring and Inuit Water Use and Rights
Reference	240916 2AM-MRY1325 Attachment 1 - Water Licence Water Quality Monitoring Results 2013-2023-ILAE 240626-2AM-MRY1325-WL-Renewal Application & Supporting Information ILAE
Discussion	<p>Baffinland has provided a summary of water quantity and quality results in its “Application and Supporting Information” document, as well as quantitative water quality results (Attachment 1, September 16). However, Baffinland has not provided any analysis of water quality in relation to Inuit water use and rights. Water monitoring locations do not appear to have been chosen based on any recent Inuit input. Thresholds for water quality do not appear to have been designed with the benefit of Inuit Qaujimaningit . The results of water quality monitoring have not been considered in relation to Inuit CRLU. As such, the implications of the findings related to water quality and Inuit CRLU cannot be precisely known.</p> <p>Likewise, information provided by the Applicant in section 5 of the “Application and Supporting Information” document does not include adequate detail about monitoring from an Inuit perspective. Baffinland’s summary of monitoring results does not account for impacts to Inuit water rights and CRLU.</p> <p>Likewise, no information is provided about dust contamination in water bodies of importance to Inuit. Dust levels along the Tote Road have been higher than predicted and higher than is acceptable to Inuit. This, along with the fact that dust accumulates in snow and then is released in a pulse during freshet into water bodies, does not seem to have been addressed in this application. No information is provided about how this has this been investigated and how is it being managed.</p> <p>Impacts to Inuit water rights are an important consideration in this renewal application. Inuit-led water monitoring is an important way of assessing impacts on an ongoing basis to inform Project decisions, adaptive management plans and responses, and upcoming regulatory processes. As Baffinland states in Appendix I, the Inuit Stewardship Program (ISP) is a suitable avenue to address these concerns. However, no clear mechanism has been developed that specifies how Baffinland and regulatory agencies should consider the results of Inuit-led water monitoring in Project and regulatory decisions.</p>

Comment Number	QIA-TR-33
Issue	Water Monitoring and Inuit Water Use and Rights
	Lastly, Baffinland's annual reports do not include a section for Inuit-led water monitoring results (Appendix A, p16).
Recommendation	QIA recommends that, should the Board grant this Application, the NWB include a licence condition requiring the Applicant to review and modify the monitoring program annually in line with the findings of applicable scientific studies and Inuit-led monitoring.

Comment Number	QIA-TR-34
Issue	Inuit Freshwater Engagement
Reference	<p>240916 2AM-MRY1325 Attachment 3 - Freshwater Environment Engagement Comments-ILAE</p> <p>240910-BIM Ltr to NWB re QIA WL Renewal Comments_Final</p> <p>240815 2AM-MRY1325 BIM Ltr to NWB re WL Renewal Comments-ILAE</p>
Discussion	<p>Baffinland's Inuit freshwater engagement record does not demonstrate adequate consideration of several outstanding concerns expressed by Inuit especially about impacts to Inuit water rights and CRLU. QIA's review of Baffinland's Attachment 3 submitted September 16 entitled "Freshwater Environment Engagement Comments" and other documents suggest that many of these impacts remain largely unaddressed. Baffinland's responses refer to management plans; however, the plans in their current form do not address the ongoing concerns expressed by Inuit about:</p> <ul style="list-style-type: none"> • Changes to fish behavior; • Reductions in fish availability, reduced catches; • Contamination in fish habitats and flesh; • Increased animal mortality; • Ore discolouration in snow and animal fur; • Drinking water contamination; • Culverts impacting ice breakup and fish populations. <p>In several of its recent "management responses", Baffinland claims to have integrated Inuit concerns into Appendix J. However, Appendix J does not contain any information on impacts and does not summarize or analyze information on Inuit CRLU to allow for conclusions therein to inform Project decision-making. Existing Inuit Qaujimajatuqangit must significantly influence project monitoring and adaptive management such that Inuit perspectives are accounted for and concerns addressed. In other places, Baffinland responds to Inuit concerns by referencing engagement related to offsetting but fails to directly address the issues themselves (Sept 10 IR responses, p. 5).</p>

Comment Number	QIA-TR-34
Issue	Inuit Freshwater Engagement
	<p>The Applicant ought to directly address Inuit concerns about impacts, and the information about impacts from an Inuit perspective already exists. Baffinland continues to omit or discount this existing information, for example by claiming that, because participants in the Tusaqtavut studies did not consider the Proponent's original effects predictions and mitigation measures, the participants' experiences of Project-related impacts are not relevant (BIMC Letter September 10, p. 3). However, the Tusaqtavut studies describe impacts that Inuit have been experiencing despite Baffinland's mitigation measures. As such, the Tusaqtavut studies should be interpreted as evidence of the need for improvement of Baffinland's current mitigation measures and of the fact that effects experienced by Inuit have surpassed those predicted by Baffinland in their previous assessments.</p> <p>In its September 10 comments, Baffinland states that, "Regarding QIA's comment on Baffinland's, 'adherence to requirements set by non-Inuit agencies and organizations that do not consider Inuit use, objectives, or measures,' Baffinland would like to clarify that this pertains specifically to compliance with the Fisheries Act, as administered by the Department of Fisheries and Oceans (DFO)" (3). Baffinland goes on to explain that "the Government of Canada has implemented the Inuit Nunangat Policy, which mandates that all federal departments and agencies, including DFO, incorporate Inuit perspectives and needs into the development of policies and programs. Baffinland will continue to adhere to applicable federal and territorial requirements, in addition to continuing to work with QIA and engage with Inuit to have opportunities to gather and integrate Inuit view" (3). However, this clarification does not help address outstanding Inuit concerns about dust and other issues identified in comments and other sources. The Inuit Nunangat Policy does not have direct bearing on freshwater impacts from mining projects and does not apply to this water licence, which is a Nunavut jurisdictional issue and must consider impacts to Inuit water rights and use. Baffinland is still required to address outstanding Inuit concerns about freshwater and discrepancies between Inuit and Baffinland conclusions about impacts.</p> <p>Overall, Baffinland continues to adhere to its conclusion that "No data collected to date has indicated the conditions in the receiving environment have meaningfully changed in the area since field studies were carried out in relation to the 2012 FEIS..." (Aug 15 letter, p. 13). However, Baffinland has committed to engage QIA on how to update its own information based on QIA study findings about Project-related impacts to Inuit CRLU related to freshwater. Baffinland's recognition that more data is required suggests their conclusion that no changes have occurred to the receiving environment may be premature. Baffinland further states that "this will be the subject of additional analysis</p>

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Issue	Inuit Freshwater Engagement
	<p>and engagement with Inuit as part of the development of expanded freshwater related monitoring programs prior to commencement of construction and operations” (ibid.).</p> <p>Overall, this water licence application does not sufficiently consider the results of Inuit engagement and knowledge about the changes communities have already observed to the environmental, social, and cultural conditions that support Inuit water rights and CLRU, both in relation to the Project as a whole and the Steensby area in particular.</p>
Recommendation	<p>Similarly to QIA-TR-32, QIA recommends that, should the Board grant this Application, a licence condition requiring the Applicant to incorporate the QIA studies’ findings about Project-related impacts to Inuit CRLU related to freshwater into all relevant management plans and submit them for Board approval on the earliest of within 120 days of QIA releasing the studies or December 31, 2025.</p>

Comment Number	QIA-TR-35
Issue	Cumulative Effects
Reference	<p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-A-ILAE</p> <p>240916 2AM-MRY1325 Attachment 4 - Summary of Cumulative Effects-ILAE</p>
Discussion	<p>QIA requests a more meaningful and fulsome consideration of cumulative effects as part of this water licence renewal application. The NWB requires applicants to “Describe direct, indirect, and cumulative impacts related to water and waste” (11, emphasis added). QIA stresses the importance of ensuring Inuit Qaujimajatuqangit and CRLU are considered when evaluating cumulative impacts to both the physical environment and Inuit water use and rights. Baffinland’s cumulative effects information provided with this water licence contains no evidence that Inuit inputs were used to determine the scope of the assessment or to evaluate impacts. In fact, there is no clearly defined assessment area (or temporal back cast) even though Baffinland excluded most impacts based on their geographic relationship to the Mary River Project (Attachment 4, Table 2). Furthermore, Baffinland’s implied (but not explicitly stated) criterium for inclusion is that other impacts must directly overlap with the Mary River Project to be considered. However, there doesn’t need to be direct spatial overlap for Inuit CRLU and water rights to be impacted cumulatively; impacts only need occur within an area that Inuit communities use. Inuit do not experience impacts in isolation; they experience all past and present impacts together. For these reasons, Inuit use and knowledge should inform the scope of the assessment.</p> <p>As well as excluding potentially significant cumulative impacts, Baffinland also does not provide adequate evidence and to back up with clear reasoning its claims that there will</p>

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Issue	Cumulative Effects
	<p>be no significant cumulative effects from remaining sources (the Project and climate change) due to changes in water quantity, water quality, or fish habitat. Very little information is provided about effects pathways for the Project, and none are identified that may impact Inuit CRLU, even though evidence exists in available sources that Inuit water rights and use have already been impacted.</p> <p>The information provided by Baffinland also does not contain trend-over-time data for the Project as a whole. The brief summaries of water monitoring results presented in Baffinland's "Application and Supporting Information" document offer only a "snapshot in time" of results, most of which is for the year 2023 only. The summaries do not include an analysis of changes in water quality results over time aside from a single comparison of water volume use during the construction and operation phases. There is no comparison of current conditions to a baseline, and there is no description of a baseline. Both are required, so that QIA and the NWB can evaluate overall changes to conditions in the Project-affected area. According to existing Inuit Qaujimajatuqangit, effects to both the physical environment and Inuit water rights and use are in fact not the same as those predicted in the Applicant's original licence application. Information should be considered by the NWB about how those conditions have changed over time.</p> <p>Baffinland also relies on unnamed mitigation measures to argue that there will be no significant effects due to the Project in all its past, current, and future iterations, and provides no evidence of how effects will be mitigated (Summary of Cumulative Effects, pp. 2-3). However, the fact that Inuit have already experienced impacts that differ from Baffinland's predictions suggests strongly that Baffinland's mitigation measures are insufficient and in need of close review by Inuit parties.</p> <p>There is also no characterization of cumulative effects. The magnitude, extent, duration, reversibility, and other characteristics are not described for impacts from either the Project or climate change. Without an effects characterization with clear reasoning, impacts from both the Project and climate change cannot be known. Baffinland concludes that no cumulative effects from climate change and the Project will occur (Summary of Cumulative Effects, p. 2). However, because effects themselves are not actually characterized or evaluated against any benchmarks, thresholds, or criteria, there is no way to know whether, for example, the effects of climate change alone would be significant or not, let alone the combined effects of both climate change, future iterations of the MRP, and other projects.</p> <p>QIA acknowledges that this cumulative-effects information is from Baffinland's submission for its recently suspended NIRB review of Sustaining Operations Proposal 2, but that this information was inadequate for the same reasons outlined above. We look forward to working with Baffinland on a more meaningful cumulative effects assessment</p>

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	(CEA) that uses a scope that reflects Inuit use of the entire affected area and reflects Inuit perspectives and experiences of all relevant past, present, and likely future impacts.
Recommendation	<ol style="list-style-type: none"> 1. QIA requests that Baffinland identify when it plans to bring forward additional total cumulative effects analysis of the entire reasonably foreseeable Mary River Project, along with other cumulative effects-causing agents and activities, as per the guidance to be received from the Nunavut Impact Review Board. 2. QIA requests, if this NWB licensing process cannot be synchronized with the required comprehensive cumulative effects assessment that considers the full range of past, present, and likely future impacts to Inuit water rights and CRLU, that Baffinland be required by a water licence condition to report results of its cumulative effects assessment work within the within 6 months of the completion of the cumulative effects assessment currently prescribed from the NIRB process, and that the licence, if issued by the NWB, allows the Board to incorporate the findings of the CEA into the licence.

Comment Number	QIA-TR-36
Issue	Impacts to Inuit Culture, Resources, and Land Use (CRLU) and water rights
Reference	<p>240626-2AM-MRY1325-WL-Renewal-Applic-1Application&Supporting-Info-ILAE.</p> <p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-A-ILAE. Application for Water Licence Renewal.</p> <p>240626-2AM-MRY1325-WL-Renewal-Applic-Appendix-I-ILAE. Baffinland's Response to QIA's Comments on Draft Application.</p> <p>240626-2AM-MRY1325-WL-. Renewal-Applic-Appendix-B-ILAE 2. Supplementary Information Guideline (SIG) Form.</p> <p>Qikiqtani Inuit Association's Tusaqtavut for Phase 2 Application of the Mary River Project (Pond Inlet).</p> <p>QIA'S Tusaqtavut Study Specific to Baffinland's Proposed Phase 2 of The Mary River Project For The Communities of Arctic Bay and Clyde River</p>
Discussion	In Appendix A of their application, Baffinland states that there has been no change in the predicted impacts to the environment and Inuit water rights compared to those identified for their existing licence (11-12). However, impacts on Inuit Culture, Resources, and Land Use (CRLU) and water rights need to be considered in this Application. QIA is concerned that Baffinland's current evidence base and assessment is not sufficient to reasonably determine whether the Project has significantly impacted the Inuit water

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Issue	Impacts to Inuit Culture, Resources, and Land Use (CRLU) and water rights
	<p>rights and use or will in the future. Any such change – many of which have already occurred – would constitute an adverse impact on Inuit rights under the Nunavut Agreement.</p> <p>The NWB requires a "description of any potential effects of the project on the quality, quantity, or flow of waters flowing through Inuit Owned Land (IOL)" and is committed to considering Inuit Qaujimajatuqangit in its decisions. Project effects on Inuit water rights cannot be adequately evaluated without extensive Inuit input on specific Project impacts and overall effects. As mentioned, project effects on Inuit water rights have already surpassed Baffinland's predictions in its original FEIS, on which the original water licence was based. It is necessary to seriously consider recent information on this subject.</p> <p>Baffinland suggests that this renewal application need not consider Project impacts to Inuit water rights based on information that has come to light since the original application, including Inuit Qaujimaningit directly related to Project impacts; significant changes in Project activities and outputs (e.g., the increase in ore haulage along the Tote road); and changes to freshwater conditions due to climate change. In its response to QIA's advance comments 2-2, 3-2, 4-2, 5-1, and 5-2 in Appendix I, Baffinland suggests that this water licence application be renewed without information about impacts to Inuit water rights and CRLU. In its response to other QIA comments, Baffinland argues that such topics are beyond the scope of the water licence and are instead topics for the NIRB process (Appendix I comments 1-1, 2-1, 3-1 and September 10 response QIA-20). Baffinland is incorrect.</p> <p>The NWB must take into serious consideration, as has been shown in the NIRB process (especially by NIRB in its report of assessment for the rejected Phase 2 Application), that the Project-related CRLU effects observed and felt by Inuit (including impacts related to water and the water licence) have already exceeded Baffinland's original predictions. This has proven to be the case even at the current production rates that are much lower than the full production rates allowable under NIRB Certificate 005, which Baffinland's original effects predictions were based on. These effects have not been captured by Baffinland's existing monitoring system. Baffinland's lack of information on this topic is not evidence of an absence of effects. It is more likely evidence that their monitoring system is not sensitive enough or focused enough to capture impacts on CRLU. This needs to be greatly improved. The absence of a fulsome water monitoring system that is based on both Western science and Inuit Qaujimajatuqangit has resulted in Baffinland's underestimation of existing, let alone future, effects of the project on water quality, quantity and flow. This is especially the case given concerns raised by Inuit regarding the impacts of dust, Tote Road operations, and mine operations on water that have not been reconciled by Baffinland.</p>

Comment Number	QIA-TR-36
Issue	Impacts to Inuit Culture, Resources, and Land Use (CRLU) and water rights
	<p>Information on impacts to Inuit water use and rights currently exists that Baffinland has consistently omitted and even discounted (Sept 10 IR responses, p. 3). This information has significant bearing on how this licensing process. Baffinland states that “it is not clear how this [CRLU] information would be considered in the NWB process” (Appendix I, comment 3-1). The information should be used to determine whether ongoing and anticipated Project impacts to Inuit water rights are significant enough to warrant reconsideration of the terms of this water licence.</p> <p>Specifically, QIA disagrees with Baffinland's estimation that the effects of the undertaking on the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL) are the same as those considered in the existing water licence (Appendix A, Section 19, p12). Impacts have already been observed and experienced by Inuit that differ in both their nature and in their magnitude from those predicted in the 2012 FEIS (as flagged explicitly by NIRB in its Phase 2 decision) but that are not mentioned in this application. Some of this information is already available to Baffinland in the Tusaqtavut studies and community testimony to the NIRB. The Tusaqtavut studies from Pond Inlet, Arctic Bay, and Clyde River indicate the following impacts:</p> <ul style="list-style-type: none"> • Increased contamination of snow, ice, and water bodies from dust caused by Project components associated with the mine and the Tote Road, in areas with existing contamination as well as pristine areas currently without contamination; • Deterrence from traveling to impacted areas due to perceived or actual contamination of freshwater sources out on the land; • Dust contamination of drinking water sources in communities, as well as the reservoir at the mine site; • Impacts to wildlife health due to consumption of water sources contaminated by dust from Project activities; and • Impacts to the health and condition of fish (Arctic char) due to changing water quality and impacts from the Milne Port and Northern Shipping Route; • Habitat loss and alteration in both marine and freshwater environments for Arctic char due to activities related to Milne Port, North Railway, and Tote Road, leading to a decline in fish populations; and • Species avoidance of areas due to impacts to fish habitat and diminished water quality • Impacts to quality and quantity from the Tote Road and mine site; <p>Although Baffinland has indicated that the Tusaqtavut studies did not consider Baffinland's mitigation measures, these studies present detailed evidence of impacts that Inuit are currently experiencing on the land despite Baffinland's mitigation measures.</p>

Comment Number	QIA-TR-36
Issue	Impacts to Inuit Culture, Resources, and Land Use (CRLU) and water rights
	QIA is in the process of completing an IQ Water Values Study with Pond Inlet that will bring forward more information on impacts to Inuit water rights and CRLU and will provide further information to inform the NWB process.
Recommendation	<ol style="list-style-type: none"> 1. QIA requests that upon submission of its freshwater IQ study, the NWB duly consider these impacts in its decisions. The NWB should take into serious consideration that the CRLU effects observed and felt by Inuit have exceeded Baffinland's original predictions and have not been captured by Baffinland's existing monitoring system and should allow adequate time for the consideration of existing and forthcoming Inuit data on impacts. 2. Given that the Tusaqtavut studies describe impacts related to freshwater that Inuit have actually experienced, QIA recommends that the NWB consider the findings in the Tusaqtavut studies as evidence of the potential deficiencies of Baffinland's current mitigation measures related to freshwater and of the fact that effects experienced by Inuit have surpassed those predicted by Baffinland in their previous assessments. 3. QIA reiterates its recommendation to the NWB in QIA-TR-34.: "QIA recommends that, should the Board grant this Application, a licence condition requiring the Applicant to incorporate the QIA studies' findings about Project-related impacts to Inuit CRLU related to freshwater into all relevant management plans and submit them for Board approval on the earliest of within 120 days of QIA releasing the studies or December 31, 2025."

Comment Number	QIA-TR-37
Issue	Blasting for tunnel construction
Reference	240815 2AM-MRY1325 Att 4. Freshwater Environment Engagement Comments-ILAE.
Discussion	In responses to concerns raised by Inuit during engagement with Inuit communities from 2014 to 2024, Baffinland responds to Inuit concerns about the effects of blasting for tunnel construction by stating that, rather than considering Inuit suggestions that blasting should be restricted to certain seasons, it will instead adhere to DFO requirements regarding the proximity of blasting for tunnel construction and the threshold for blast sizes. However, in order to ensure blasting does not impact Inuit use, blast size thresholds and proximity to fish bearing streams should also be informed by Inuit knowledge and engagement (p. 12-13, November 28, 2023).
Recommendation	Further engagement, research, and analysis are required to ensure blasting plans account for Inuit concerns, thresholds, and objectives in relation to freshwater and fish habitat.

Comment Number	QIA-TR-37
Issue	Blasting for tunnel construction
	This engagement must seek consensus between affected Inuit communities, Baffinland, DFO, and the NWB.

Comment Number	QIA-TR-38
Issue	Fish habitat offsetting
Reference	240815 2AM-MRY1325 Att 4. Freshwater Environment Engagement Comments-ILAE.
Discussion	Baffinland's responses to concerns raised by Inuit during engagement with Inuit communities from 2014 to 2024 demonstrate a lack of adequate engagement and effort to achieve a consensus about fish habitat offsetting plans. Offsetting plans are relevant to this Application because impacts to freshwater resources that require mitigation warrant NWB consideration of the effectiveness of the mitigation measures' ability to address impacts. In two responses, Baffinland indicates that IQ was used to design offsetting measures (p. 7, 2019 Summary; p. 13, December 1, 2023) while, in other comments, Baffinland explains that the DFO determined that the offsetting locations selected by Inuit were not sufficient (p. 14, March 19, 2024).
Recommendation	Further engagement, research, and analysis are required to ensure offsetting measures for fish habitat account for Inuit concerns, thresholds, and objectives. This engagement must seek consensus between affected Inuit communities, Baffinland, the DFO, and the NWB. QIA requests a condition of this licence requiring the Proponent to commit to further consent-based engagement on fish habitat offsetting.