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July 26, 2024

Robert Hunter Nunavut Water Board PO Box 119 Gjoa Haven, NU X0B 1J0

Email: <u>licensing@nwb-oen.ca</u>

Subject: QIA Completeness Check of Water Licence Renewal Application No: 2AM-MRY1325

Dear Robert Hunter,

The Qikiqtani Inuit Association (QIA) respectfully submits the following response to the June 27, 2024 invitation from the Nunavut Water Board (NWB or the Board) for a completeness check of Renewal Application (the Application) for Water Licence No: 2AM-MRY1325 (the Licence). The Application was filed by Baffinland Iron Mines Corporation (Baffinland or the Applicant) for the Mary River Project (the Project).

In its correspondence, the Board stated:

- ... the NWB is inviting interested persons to comment on the following:
 - completeness of the Application based on their initial technical assessment;
 - 2) Information Requests (IRs) related to the Application that must be provided to enable the parties to complete their full technical review; and
 - 3) Type of TM/PHC to be held.

QIA is pleased to submit its IRs in respect of the Application in Appendix A of this correspondence. Based on the scale and scope of QIA's IRs, it is QIA's opinion that the Application is incomplete and will benefit from additional information to be submitted by Baffinland. This outstanding information includes such issues, as:

- Compliance assessment;
- Schedule of construction and operations;
- Inuit engagement;
- Incorporation of Inuit Qaujimajatuqangit;
- Inuit indicators and measures;





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- Updates of management plans;
- Monitoring at the Steensby Component and overall results of Project aquatic monitoring;
- Water quality modelling representative of site activities and climate change;
- Management of impacts of water withdrawal;
- Effluent quality;
- Water and sediment quality;
- Application of Trigger Action Response Plans for erosion and sedimentation events and in water supply, sewage, and wastewater management;
- Operations and closure and reclamation of water storage infrastructure;
- Cumulative effects, and
- Usage of up-to-date information.

Providing the outstanding information as indicated in our completeness check will ensure that the Inuit of the Qikiqtani region have at their disposal all necessary materials to understand and, consequently, have a say in how the impacts of the Project activities on their rights are managed and mitigated.

In the Application, Baffinland relies heavily on the argument that it is proposing no changes in the activities, and that impacts to Inuit water rights will be the same as those addressed under their existing Licence. However, well-established information from Inuit indicates that the actual impacts being experienced by Inuit are greater and likely different from those originally predicted by Baffinland. Therefore, QIA recommends that the Board give careful consideration to this Application.

Regarding the administrative matters, QIA recommends that the Technical Meeting and the Pre-Hearing Conference be held in-person in Pond Inlet (Mittimatalik), as Pond Inlet is the community that is currently impacted most strongly by the Project. Alternatively, other communities that are currently or will be impacted by the Project activities should be considered:

- Ikpiarjuk (Arctic Bay);
- Kangitugaapik (Clyde River);
- Sanirajak;
- Igloolik;
- Kimmirut, or
- Kinngait.

QIA understands the existing logistical challenges in Nunavut and that, out of all Qikiqtani communities, the City of Iqaluit provides most facilities for hosting an event of the scale of an NWB licensing meeting;



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however, to ensure the Board hears and thoroughly examines the concerns of the communities, QIA encourages the NWB to hold its meetings for this Application in one of the communities listed above. In addition, QIA recommends ensuring that the representatives of all of the above communities be invited to participate in the Board's public meetings for this Application. QIA understands that doing so is historically in line with the Board's practices.

In addition, QIA would like to advise that the Inuit Stewardship Program's (ISP) Inuit Committee established for the ISP's Culture, Resources and Land Use Monitoring Stream has recently recommended that meetings be scheduled outside of the months of May, June or August due to traditional harvesting activities in the communities. While it is an unlikely concern for the NWB's Technical Meeting/Pre-Hearing Conference for this Application, QIA encourages the Board to consider scheduling other events for the Application with this recommendation in mind.

As the NWB is aware, the Applicant has recently filed Sustaining Operations Proposal 2 (SOP2) with the Nunavut Impact Review Board (NIRB) to extend temporarily approved 6-Mtpa ore shipping from Milne Port for an additional ten years. QIA would like to bring to the Board's attention that the current Water Licence for the Project was issued for a 4.2-Mtpa ore transportation and shipping rate via the Tote Road and Milne Port, respectively. Consequently, the past and current impacts on freshwater from the 6-Mtpa rate, as well as the potential for the 6-Mtpa rate to extend for an additional 10 years, must be considered in this Water Licence Renewal.

Another factor that QIA would like to request that the NWB consider is the direction of the Minister of Northern Affairs (the Minister) for the Nunavut Impact Review Board to assess cumulative effects of the Mary River Project. On April 8, 2024, the NIRB issued its Cumulative Effects Assessment Framework Workshop Report and currently awaits the Minister's response. The results of this Cumulative Effects Assessment for the Project may have bearing on the Licence, this Application, and future amendments.

QIA looks forward to our continued participation in the Board's processes and thanks the NWB for the opportunity to provide our feedback on the completeness of this Application. Please do not hesitate to contact QIA for any clarification.

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Appendix A QIA Completeness Check Comments

Comment Number	WL Renewal IR #1.
Issue	Compliance status
Reference	Document Name: Supplemental Information Guideline
Discussion	The Supplemental Information Guideline states:
	If the application is for a renewal and/or amendment of an existing licence, provide a compliance assessment/status report. This report must document the status of compliance for each condition of the existing water licence
	The Applicant provided information on inspections; however, no full compliance status report was included.
Recommendation	Please update the Application by providing the compliance status report for each condition of the Licence.

Comment Number	WL Renewal IR #2.
Issue	Geographic scope of plans
Reference	Document Name : Application and Supporting Information to Renew Type A Water Licence
	2AM-MRY1325;
	Appendix L8 Aquatic Effects Monitoring Plan
	Section: S2.2 PROCEEDING WITH THE APPROVED STEENSBY COMPONENT
	Page: P11
Discussion	While planned activities outlined for the near term of the proposed renewal period (15
	years) do not encompass the Steensby Component of the Project, Baffinland has indicated
	that "The Steensby Component is adequately covered under the scope of the existing
	Licence, and thus no amendments to the Licence are expected to be required to advance
	this part of the Project."
	As Baffinland maintains that the Steensby Component can be pursued under the
	current/renewed water licence, we expect monitoring and management plans to
	encompass its geographic scope. We are particularly concerned that the available baseline
	for the aquatic environment within the Steensby Component has not been updated in
	recent years, and no monitoring sites are included in the Aquatic Effects Monitoring
	Program (AEMP).
Recommendation	Please update the AEMP to include both reference sites and locations that may experience
Recommendation	impacts from project activities associated with the Steensby Component. Stations
	associated with the Steensby Component with existing baseline data may be included to
	maintain continuity for an extended period of record.
	These stations are intended to provide an updated geographic and temporal baseline for
	future works that may reasonably be expected during the renewal period.

Comment Number	WL Renewal IR #2.
Issue	Geographic scope of plans
	Alternatively, Baffinland may provide a summary of available baseline information
	associated with the Steensby Component and rationale as to why updated baseline
	information is not required.
	Provision of this information is necessary to assist stakeholders in determining whether
	sufficient baseline information exists for all activities that may occur during the renewal
	period that are covered under the licence, and to ensure requisite data are collected in a
	timely manner if they are not yet available.

Comment Number	WL Renewal IR #3.
Issue	Proposed schedule
Reference	Document Name: Appendix A Water Licence
	Section: Proposed time schedule
	Page: 18/22
Discussion	Baffinland provides the following dates for the project:
	The Mary River Project was constructed in 2013-14 and began operations in 2015. Construction of the Steensby Component will proceed once financing is in place.
	Construction Proposed Start Date: 2013 Proposed Completion Date: 2014 (month/year)
	Operation Proposed Start Date: 2028
	Closure Proposed Start Date: 2049
	Proposed Start Date: 2052 Proposed Completion Date: 2056 (month/year)
	It is unclear how these dates align with the existing project and operations, particularly
	given this water licence renewal application includes both ongoing operations as well as
	construction and operation of the Steensby Component.
Recommendation	Please clarify the operation and construction dates in relation to the existing project as well
	as the Steensby Component. This information may be provided through a detailed project
	schedule.
	This detailed schedule is requested to support stakeholder understanding of planned
	activities and determine the lead time for updating the baseline dataset along the southern
	rail corridor prior to commencing new project interactions.

Comment Number	WL Renewal IR #4.
Issue	Absent summary of existing data
Reference	Document Name: Appendix I Baffinland's Response to QIA's Comments on Draft Application; Appendix B Supplementary Information Guideline (SIG) Form Section: 12-1 Page: 5

Comment Number	WL Renewal IR #4.
Issue	Absent summary of existing data
Discussion	As part of QIA's review of Baffinland's draft water licence application, we requested "(a)
	summary of all aquatic environment data collected over the existing life of the project.
	Summaries should be used to demonstrate project compliance with water licence terms and
	conditions as well as environmental impact assessment predictions." Baffinland has
	declined to provide this information stating that these summaries are not required for a
	water licence renewal, per the NWB Guides.
	QIA disagrees with Baffinland's interpretation of the NWB guidelines as they appear to
	primarily contemplate a new water licence application rather than one with ongoing history
	where additional information is available to provide context on the functionality of existing
	plans and compliance.
	This understanding appears in line with the Nunavut Impact Review Board's recent memo
	titled "Clarification of Scope and Conformity Determination in Relation to Baffinland Iron
	Mines Corp.'s Impact Statement Addendum Associated with the NIRB's Assessment of the
	"Sustaining Operations Proposal 2" Project Proposal" and dated July 12, 2024, in which they
	indicated that "The submission must clearly identify where updates to plans and baseline
	were completed reflecting the 10 years of monitoring of the existing Project and identifying
	where updates will be required in advance of construction and operations of the Steensby
	Components" (p9/10).
	QIA's request is further in line with Agnico Eagle's application to renew the water licence
	for the Meadowbank Gold Mine project in 2014 (Nunavut Water Board (NWB 2AM
	MEA0815) Type A Water Licence Renewal Application – Main Supporting Document), in
	which a more detailed review of existing aquatic environment data was provided.
Recommendation	QIA reiterates our request for a summary of all aquatic monitoring data to demonstrate
	compliance with water licence terms and conditions.
	We note that the reference to the available but un-summarized data within the annual
	reports indicated in supplemental information guide is insufficient to address this
	information request.

Comment Number	WL Renewal IR #5.
Issue	Management plans
Reference	Document Name: Appendix I Baffinland's Response to QIA's Comments on Draft
	Application;
	Section: 12-2
	Page : 5
Discussion	As part of QIA's review of Baffinland's draft water licence application, we requested that
	management plans be submitted as part of the licence application, and that "they include
	updates that address historical noncompliance with licence terms and conditions,
	environmental impact assessment predictions, and concerning trends observed in the
	aquatic environment monitoring data as well as issues identified by stakeholders in their

Comment Number	WL Renewal IR #5.
Issue	Management plans
	reviews of previous versions of those plans as well as the Annual Reports." Baffinland has
	declined to provide this information stating that Baffinland "provides an updated list of
	management and monitoring plans for the Project annually as part of the QIA-NWB Annual
	Report for Operations."
	QIA highlighted in our comments on the draft licence application that exceedances of EIS
	predictions / AEMP benchmarks and water licence terms and conditions have occurred
	regularly during the operational period (see QIA IR12 in Appendix I for more information).
	While management and mitigation plans have been updated periodically, it does not
	appear that these updates have been sufficient to curtail ongoing environmental
	management concerns.
Recommendation	Following the completion of the summary of existing environmental data requested in QIA
	comment "Absent summary of existing data", we request Baffinland use this information
	to determine which management and mitigation plans require updates and submit those
	management plans for stakeholder review.
	We note that Baffinland will already be completing this summary and subsequent plan
	update following the NIRB request issued in their recent memo titled "Clarification of Scope
	and Conformity Determination in Relation to Baffinland Iron Mines Corp.'s Impact
	Statement Addendum Associated with the NIRB's Assessment of the "Sustaining Operations
	Proposal 2" Project Proposal" and dated July 12, 2024, in which they indicated that "The
	submission must clearly identify where updates to plans and baseline were completed
	reflecting the 10 years of monitoring of the existing Project and identifying where updates
	will be required in advance of construction and operations of the Steensby Components"
	(p9/10).
	This information is a required component of this application as the project will be operating
	under the licenced period at a 6 Mtpa rate currently requested through Baffinland's SOP2
	application to the NIRB.

Comment Number	WL Renewal IR #6.
Issue	Modeling
Reference	Document Name: Appendix I Baffinland's Response to QIA's Comments on Draft
	Application;
	Appendix A4 2023 Water Quality Model Update, Waste Rock Facility Report;
	Appendix L3 – Surface Water and Aquatic Ecosystem Management Plan
	Section: 12-3
	Page: 5
Discussion	As part of QIA's review of Baffinland's draft water licence application, we requested an
	updated "water and load balance model for all discharges and interactions with the aquatic
	environment that incorporates updated baseline data (relative to the existing licence),
	climate change predictions extending through and past the requested licence duration and

Comment Number	WL Renewal IR #6.
Issue	Modeling
	includes model validation using project data collected over the previous water licence
	period."
	Baffinland has declined to provide this information indicating "runoff from the waste rock
	facility is treated without long-term storage or recycle before discharge. Similarly, the
	various sedimentation ponds across the site focus on simple removal of total suspended
	solids (TSS) prior to discharge to the environment. There is no need for a water and load
	balance to predict make-up water requirements, or changes to effluent chemistry over time
	due to recycling or storage with tailings."
	We acknowledge that tailings are not present on site and that an updated water quality
	model has been provided within the Waste Rock Management Plan; QIA submitted
	comments on that model as part of our submission on the 2023 Mary River Annual Report
	to the NWB.
	We remain concerned, however, about whether the water treatment plant will be able to
	continue meeting effluent quality criteria over the licenced period given the progression of
	climate change and the more rapid deposition of waste rock stemming from the ongoing 6
	Mtpa processing rate. While the water quality model for the WRF has recently been
	updated using water quality during the accelerated processing rate in recent years, it does
	not appear to have incorporated more recent climate change predictions and the greater
	volume of waste rock that may be exposed to weathering over the coming 15-year licence
	period.
Recommendation	QIA wishes to refine our request to Baffinland to update the WRF water quality model (i.e.,
	the 2023 Water Quality Model Update, Waste Rock Facility Report) to expressly include
	consideration of climate change and the 6 Mtpa accelerated deposition rate that will
	continue being implemented should SOP2 be approved to go ahead.
	The requested modeling should be used to update the SWAEMP, or rationale provided as
	to why this is not required.
	This information is requested to provide confidence that effluent quality criteria will
	continue to be met, and water quality will be maintained within EIS predictions in receiving
	environment.

Comment Number	WL Renewal IR #7.
Issue	Professional judgement in TARPs
Reference	Document Name: Appendix L3 Surface Water and Aquatic Ecosystem Management Plan
	Section: Table 9-2 - Trigger Action Response Plan - Erosion and Sediment Release Events
	Page : 36
Discussion	Several responses (TSS Exceedance of Water Licence Criteria and Regulatory Feedback
	triggers) are tied to the statement "If sediment attributed to project infrastructure, review
	and modify controls". We note in our review of the annual report professional judgement
	was used in multiple cases (see QIA submission to NWB - QIA 2023 NWB AEMP#3, QIA 2023

Comment Number	WL Renewal IR #7.
Issue	Professional judgement in TARPs
	NWB CREMP#9, QIA 2023 NWB CREMP#15) to conclude that an observed effect was not
	attributed to the project.
Recommendation	In an effort to ensure an objective evaluation of source attribution, we request Baffinland
	provide objective criteria in the TARP that will be used to determine the source of sediment.
	We also highlight that any interaction of water with project infrastructure or in the local
	study area (LSA) is likely to have some contribution by project activities and must therefore
	be mitigated – this consideration should be included within the attribution criteria.
	The requested information is intended to provide an opportunity for Baffinland to refine
	the TARP during these proceedings with input from all stakeholders to ensure the plan
	functions as intended and constrains project interactions with the aquatic environment to
	that predicted within the EIS.

Comment Number	WL Renewal IR #8.			
Issue	Water withdrawal limits and restrictions			
Reference	Document Name: Appendix L4 Fresh Water Supply, Sewage, and Wastewater Manageme			
	Plan (FWSSWMP)			
	Section: Table 3 Water Use Authorized for Dust Suppression Along the Tote Road			
	Page: 1of 5 P13			
Discussion	The table indicates a restriction on water taking during low flow years, constraining water			
	takings to June and July (i.e., during and following freshet). In light of climate change and			
	increased variability in flows, it is unclear whether these factors have been considered in			
	the water withdrawal window.			
Recommendation	Please provide a discussion as to whether additional restrictions may be required to			
	mitigate and manage impacts to the aquatic environment stemming from water			
	withdrawal activities. QIA is particularly interested in incorporating precipitation			
	conditions/snowpack accumulation as a potential criterion for further restricting water			
	withdrawals (in addition to ambient flow conditions) that are reasonably expected to result			
	in lower than mean flows.			

Comment Number	WL Renewal IR #9.			
Issue	Applicable regulations for Milne Port discharges			
Reference	Document Name: Appendix L4 FWSSWMP			
	Section: 7.2.1 Milne Port Stockpile Surface Water Management Ponds			
	Page: 1of 5 P28			
Discussion	At present, water licence criteria are applied to discharges from Milne Port surface water			
	management ponds. This water is in contact with process materials, including the ore			
	stockpile			
Recommendation	The current licence regulates the discharges to the marine environment from the Milne			
	Port surface water management ponds due to the potential to impact freshwater. We			

Comment Number	WL Renewal IR #9.
Issue	Applicable regulations for Milne Port discharges
	therefore request Baffinland provide a discussion as to why discharges of water that has
	come into contact with the processed ore to the marine environment are not subject to the
	Metal and Diamond Mine Effluent Regulations (MDMER).

Comment Number	WL Re	WL Renewal IR #10.						
Issue	Missi	Missing TARP in FWSSWMP						
Reference	Document Name: Appendix L8 Aquatic Effects Monitoring Plan;							
	Appendix L4 FWSSWMP							
	Section	n: Ta	ble 5.2 TA	ARP T	able			
	Page:	P66						
Discussion	J	land ER ACTION RESPON		he fo	llowing	section in the TARP table:		
	Monitoring Plan	Objective	Performance Indicators	Activity Being Monitored	Low Risk	Threshold/ Pre-defined Response(s) Moderate Risk Hinh Risk Low Risk Moderate Risk Hinh Risk		
	MDMFR Fffluent	Detect short-term and long-term	Deleterious substances (As, Cu, Pb, Ni, Zn, TSS, Ra-226) and pH	Mine effluent discharges	Low Risk	Moderate Risk High Risk Low Risk Moderate Risk High Risk Addressed in the Fresh Water Supply, Sewage and Wastewater Management Plan		
	Monitoring	effects of the Project's activities on the aquatic	Acute Lethality Testing: Rainbow trout, Daphnia magna	and any of		Addressed in the Fresh Water Supply, Sewage and Wastewater Management Plan		
	environment resulting from the home to be project. Evaluate the Security of Montering Studies and Water Quality and Water Quality effectiveness of planned mingation measures control (detertily additional).	environment resulting from the Project Evaluate the accuracy of	Effluent characterization: hardness, alkalinity, EC, temperature, AJ, Cd, Fe, Hg, Mo, Se, NO ₂ -N, CJ, Cr, Co, SO ₆ , Tl, U, P, Mn, NH ₂ -N			Addressed in the Fresh Water Supply, Sewage and Wastewater Management Plan Note there are rig and Se discharge limits in effluent characterization that trigger a finit tissue study, if exceeded?		
		predictions Assess the	Sublethal toxicity testing (fish and/or invertebrate and/or macrophyte and/or algal species)			Addressed in the Fresh Water Supply, Sewage and Wastewater Management Plan		
		Water Quality Monitoring at exposure and reference areas: temperature, dissolved oxygen, pit, hardness, alkalinity, EC, saliety (marine only), deterrious substances and efficient characterization parameters			Receiving water quality subject to the AEMP benchmarks established for the CREMP (see below)			
	We note that issues with MDMER monitoring and compliance are deferred to the							
	FWSSWMP. However, no TARP table is present in the FWSSWMP to provide clarity on what							
	thresholds and pre-defined responses may be appropriate to handle issues pertain					ues pertaining to		
	MDMER "effluent monitoring" and "effluent and water quality monitoring studies".						g studies".	
Recommendation	Please	e upo	date the	FWS	SSWMP to include the referenced thresholds and predefined			
	respo	nses	for issues	s wit	h MDM	ER effluent monitoring, and effluent a	nd water quality	
	monit	oring	studies.					
	This information is required to understand how exceedances of MDMER criteria or trends							
	in water quality may be adaptively managed during the requested licence period.					e period.		

Comment Number	WL Renewal IR #11.
Issue	Camp Lake water quality
Reference	Document Name: Mary River Project Application and Supporting Information to Renew
	Type A Water Licence 2AM-MRY1325
	Section: 5.1
	Page: 11 of 19
Discussion	The document states: "(a)rsenic, copper, iron, manganese, and phosphorus concentrations
	were above the AEMP sediment quality benchmarks at individual stations in Camp Lake;
	however, average concentrations of these metals were below respective benchmarks,
	were comparable to background, and/or were comparable to concentrations at Camp Lake
	during baseline."

Comment Number	WL Renewal IR #11.
Issue	Camp Lake water quality
	Baffinland Iron Mine collects a wealth of monitoring data from the neighboring aquatic and
	terrestrial environments. A key component of the AEMP is the evaluation of water and
	sediment quality data against respective benchmarks and background concentrations. A
	method employed to simplify the data analysis and discussion of results was to present the
	mean value for each sediment and water quality parameter. However, raw values not
	average values, need to be reported when comparing to water quality guidelines. For
	instance, pulse events during spring freshets or summer rainstorms may enhance delivery
	of substances of concern to nearby waterbodies resulting in exceedances of water or
	sediment quality guidelines. These important, yet sporadic events, are likely to be masked
	if only the average is compared to water or sediment quality guidelines.
Recommendation	Please provide the water and sediment quality data as raw values initially to compare to
	guidelines and benchmarks then provide the averages or medians for further statistical
	analyses.
	Please provide rationale or criteria for selecting these elements.

Comment Number	WL Renewal IR #12.
Issue	KM105 Pond
Reference	Document Name: Appendix L4 FWSSWMP
	Section: 7.2.5
	Page : 30
Discussion	In the FWSSWMP, Baffinland states: "(r)egular geotechnical inspections will also be conducted, along with the removal of accumulated sediment in the pond as required." The KM105 surface water management pond collects snowmelt runoff and storm water originating from the mine haul road. These water and sediments have the potential to possess elevated concentrations of substances of concern. The removal of this sediment may have negative consequences if released back to the surrounding aquatic or terrestrial landscape. It is unclear if Baffinland Iron Mines is testing the sediment for metal(loid) concentrations prior to removal.
Recommendation	We request Baffinland Iron Mines provide the description of the process for removal of sediment from KM105 Pond. What are the processes for removal of sediment? Are there guidelines or thresholds set?

Comment Number	WL Renewal IR #13.
Issue	CREMP early detections of mine water quality influence
Reference	Document Name: Mary River Project Application and Supporting Information to Renew
	Type A Water Licence 2AM-MRY1325
	Section: 5.1
	Page: 11 of 19

Comment Number	WL Renewal IR #13.
Issue	CREMP early detections of mine water quality influence
Discussion	The document states: "(d)uring 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."
	This trend appears to be suggesting that the CREMP has detected early effects of mine
	influence on the aquatic environment. With time and additional flow contribution, these
	effects may amplify downstream until they also influence water quality and aquatic biota
	in Camp Lake.
Recommendation	Please provide the cause of these water quality changes and what actions have been taken
	to address the cause to prevent further influence within the watershed.

Comment Number	WL Renewal IR #14.		
Issue	CREMP early detections of mine water quality influence		
Reference	Document Name: Appendix L4 FWSSWMP		
	Section: 7.0		
	Page: 24 of 69		
Discussion	The document states: "(c)ontact water for the purposes of this Plan is defined as water that		
	has come in contact with ore or waste rock; it is considered equivalent to mine effluent as		
	defined under the MDMER."		
	Given the porosity of pond KM105, there is a potential for contact water to be diverted into		
	roadside drainage ditches that convey runoff into the natural environment. QIA is		
	concerned that not all contact water is being captured and treated in the proper treatment		
	ponds.		
Recommendation	Please provide information on how much contact water makes it into the natural		
	environment based on site investigations.		
	Are field-verified drainage catchment maps available for each treatment pond and the		
	roadside ditches?		

Comment Number	WL Renewal IR #15.
Issue	Stormwater management pond reclamation
Reference	Document Name: Appendix L10 Interim Closure and Reclamation Plan
	Section: Table 1.1 "Outline Of Major Reclamation Activities at Each Mine Area"
	Page: 14 of 386
Discussion	It is not clear what reclamation activities are planned for stormwater management and
	treatment/holding ponds. These water treatment features will likely have collected large
	volumes of contaminated sediment that may require careful disposal techniques to ensure
	environmental effects are mitigated.

Comment Number	WL Renewal IR #15.
Issue	Stormwater management pond reclamation
Recommendation	Please provide the methodologies proposed for reclamation and decommissioning of
	stormwater and other treatment ponds upon mine closure.

Comment Number	WL Renewal IR #16.
Issue	Inuit engagement
References	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.
Recommendation	NWB's "Water Licence Application Form Information Requirements" for section 20 of the application state that the Proponent must "Provide a summary of any consultation meetings including when the meetings were held, where and with whom". It states that the Proponent must "(p)rovide a summary of the results of consultation meetings including a list of concerns expressed and measures proposed to address concerns." Baffinland has not included with this application a summary of consultation meetings
	that addressed Inuit concerns about the Project's effects on water quality, quantity and flow through Inuit Owned Lands (IOL) or on how the Project may impact Inuit water rights. Baffinland's summary of Inuit engagement around water in Section 4 of its "Application and Supplementary Information" document provides only a list of meetings and their dates, with no summary of what was addressed in these meetings and no list of concerns. This information is required to assess how Inuit values, concerns, and impact-related issues about water have been addressed by Baffinland.
	Additionally, in their response to comment 9 in Appendix I, Baffinland states that feedback from Inuit is integrated into the <i>Fisheries Act</i> Authorizations applications and the annual Water Licence reports. However, the <i>Fisheries Act</i> Authorizations and annual reports are separate processes with different concerns and requirements. For the purposes of this water licence process, a detailed record of how Inuit communities were engaged about impacts on water and to their water rights is required. This information would give QIA, other parties the opportunity to determine whether concerns about water have been adequately addressed, whether engagement has been adequate, and whether and what further engagement around these issues is required. It would also enable the NWB to make a well-informed decision regarding Inuit concerns about the Project's impacts to Inuit water rights.
	QIA also requires more detailed information about how Inuit communities were engaged about water rights for the Steensby component. This is required in order to assess

whether consultation around the Steensby component has been adequate, especially given that more than a decade has elapsed since the original water licence that included Steensby in its scope. Much may have changed since this time, including Inuit understandings of and perspectives on the Project and its impacts on waters and Inuit water use.

Baffinland argues in their cover letter to this application and in the application itself, that this application is a renewal of the same terms, conditions and water use and waste discharge volumes and practices, implying that the application therefore should not be subject to close scrutiny regarding the Project's ongoing and likely future impacts to the waters in IOL. However, significant differences exist between the existing water licence as approved in 2013 and amended in subsequent years, all of which merit more engagement:

- The fact that Inuit observations/experience of effects differs from BIMCs estimations and monitoring;
- The 30% increase of ore hauled via Tote Road from the original water licence, which was not adequately evaluated for its potential increase the magnitude and severity of impacts to Inuit water;
- The lack of IQ data collection in the period between the original water licence and now;
- The fact that the Steensby component was never built and that there has not been adequate engagement or data collection (including Inuit Qaujimajatuqangit) for that portion of the project;
- The lack of a meaningful cumulative effects assessment, resulting in a lack of knowledge about how the Project and other human-caused changes are impacting water and how this has changed over time;
- Significant gaps in water monitoring and the need for more IQ.

Each of these issues would by themselves merit greater discussion on the water licence application. In combination, these issues make it critically necessary that Baffinland provide evidence of significant further engagement between Baffinland and Inuit parties.

Recommendation

QIA requires 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.

Comment Number	WL Renewal IR #17.
Issue	Inuit engagement
References	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325
Recommendation	Page 11 of the "Application and Supporting Information" document states that "(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."
	Inuit Qaujimajatuqangit uses visual and other sensory observations to determine whether water is in natural and good condition. These are obviously not reflected in the technical measure used by Baffinland. Baffinland provides no information about whether and, if so, how Inuit were engaged to determine dust-related monitoring thresholds and what constitutes a Project-related change related to dust.
Recommendation	QIA requires detailed information about whether and how Inuit were engaged to determine dust-related monitoring thresholds and what constitutes a Project-related change related to dust.

Comment Number	WL Renewal IR #18.
Issue	Inuit Qaujimajatuqangit
References	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325. Appendix A – Application for Water Licence Renewal. Appendix I – Baffinland's Response to QIA's Comments on Draft Application. Appendix J – Summary of Inuit Knowledge of Waterbodies Important to Inuit QIA. 2023. Qikiqtani Inuit Association Review of Baffinland's 2022 Qikiqtani Inuit Association and Nunavut Water Board Annual Report for Operations
Recommendation	Baffinland's responses and rationale in this Application are not based on an adequate foundation of Inuit Qaujimajatuqangit. 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. This information was not adequately collected to inform Baffinland's original application for their existing Type A water licence and has not been adequately collected in the intervening period. Such information is

required in order to adequately assess Project impacts to Inuit water use in the past 10 years of Project operation.

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. However, Baffinland's summary downplays the scale and importance of Inuit waterbodies in the Project-affected area and omit Inuit Qaujimajatuqangit on recent impacts. This is problematic, especially considering that Baffinland has elsewhere acknowledged Inuit concerns about dust and other Project impacts to fresh water and fish. This omission discredits the idea (well-rooted in Inuit observations) 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 snow melts and water flows across the landscape.

Additionally, Appendix J contains no summative, synthesizing mapping or analysis. The report includes a mixture of different maps and information from past studies but does not provide any one map or information summary that synthesizes the information, showing the relative locations and importance of waterbodies used by Inuit. The report only discusses locations in the context of the study that identified them. As a result, the document does not show the full extent of waterbodies of importance for Inuit.

The IQ 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.

Because the different data streams presented in Baffinland's summary are never analysed together, we never get a map 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, including but not limited to:

- Sites and areas used for gathering freshwater for drinking and other uses;
- Important Arctic char habitat, including spawning rivers and overwintering lakes;
- Important water crossings on travel routes that are relied upon to access hunting grounds and other communities; and
- Important fishing sites relied upon for traditional food harvesting.

This study will be published by QIA in the near future, and its results will be material to this NWB process.

	Additionally, QIA has made previous requests for Inuit Qaujimajatuqangit (e.g., in comments on Baffinland's annual reports to the NWB and QIA) on the following topics. Requests on these topics are outstanding:
	 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; 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; Implementation of the revegetation program.
Recommendation	QIA requests that the Applicant provide the outstanding information.

Comment Number	WL Renewal IR #19.
Issue	Inuit indicators and measures
References	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325. QIA. 2024 (Forthcoming). Inuit Qaujimajatuqangit On and Use of Freshwater Resources Study for Baffinland's Mary River Iron Mine Project.
Discussion	According to the NWB'S Water Licence Application Form Information Requirements document, this section should provide "detailed information about the content of annual reports" and should provide "water related monitoring results". However, Baffinland's responses in section 5 of the "Application and Supplementary Information" document do not provide adequate detail about the Project's existing water use from an Inuit perspective. It includes no description of how Inuit Qaujimajatuqangit, Inuit measures of water quality, and Inuit-led monitoring informed the annual reports or monitoring activities. QIA has repeatedly stressed the importance of actively integrating IQ and Inuit perspectives into water monitoring in order to adequately gage impacts to Inuit water use. Impacts to Inuit water rights cannot be assessed through the use of Western scientific measures alone. Inuit may have different perspectives on the nature and extent of effects and must be engaged to determine the "project development area" and the locations of water stations. Without this information, we cannot know whether all impacts are being captured and adequately characterized. Additionally, the Application should include information showing how water was evaluated using Inuit measures. This includes Inuit indicators of water quality including:

	 Water Colour and Clarity Water Taste and Smell Water Temperature Rate of Flow (for rivers and creeks) Waterbody Size, Depth and Connectivity Riverbed or Lakebottom Vegetation Animals/ Invertebrates Past Inuit Use Degree of Visible Human Disturbance Quality of Fish and Fish Habitat
Recommendation	Please provide information on the Project's existing water use from an Inuit perspective

Comment Number	WL Renewal IR #20.
Issue	Cumulative effects
References	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325 Appendix A – Application for Water Licence Renewal.
Discussion	Impacts to Inuit water rights and Culture, Resources and Land Use (CRLU) related to water have not been characterized in the context of cumulative effects to water. Cumulative effects on water have not been adequately characterized by Baffinland, whose previous submissions on this matter only considered a narrow range of directly overlapping factors and processes. This is the case both in the areas already impacted by the portions of the project already developed, and in the areas which have yet to see activation of major project physical works and activities.
	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.
Recommendation	Baffinland should include updated cumulative effects analysis in its Application showing how Inuit concerns about water have been impacted by the full range of factors.

Comment Number	WL Renewal IR #21.
Issue	Reliance on older information
References	Application and Supporting Information to Renew Type A Water Licence 2AM-MRY1325

Discussion	NOTE: QIA is well aware that IQ accumulates over time and some aspects of it remain consistent over time. And QIA respects that the knowledge of Inuit land users, especially elders, never "stale dates" and is always valuable and informative. Any concerns raised herein are about the need to update IQ over time and as things change, using additional information from elders and new information from new land users. Throughout this application, Baffinland is heavily reliant on information collected for its 2012 FEIS and subsequent 2013 addendum. QIA is concerned that the information
	gathered and analysis conducted on both the Project as a whole and on Steensby in particular is from sources that are over decade old, may need to be substantively updated, and that reliance on it seems imprudent and not precautionary in nature.
	In particular, there is recognition by the NIRB, Inuit parties and Canada that Inuit observations of impacts differ from Baffinland's noted effects estimation sources. Baffinland states that the predicted environmental impacts of the undertaking and proposed mitigation measures are the same as those considered in the existing water licence (Appendix A, 11) and relies on information in its 2012 FEIS and 2013 addendum. This information is over a decade old and did not adequately consider Inuit measures of environmental conditions related to water in the first place. QIA again requests the inclusion of this information in this water application. Additionally, SOP2 considers increasing ore haulage via Tote Road by 30% (4.2mtpa annually to 6.0mtpa). That means a potential increase of dust emissions, waste rock storage, and consequent impact on freshwater.
Recommendation	BIMC should identify how it has updated its understanding of the receiving environment for both the Project as a whole and for the area between the mine and Steensby, in detail, including both technical and IQ data collection.

Comment Number	WL Renewal IR #22.
Issue	Reliance on older information
References	Appendix A – Application for Water Licence Renewal.
Discussion	QIA is specifically concerned about the lack of updated information regarding trend-over-time conditions from the Mine Site south to Steensby. We cannot know that there have been no changes to conditions in this area given Baffinland has said it has not been monitoring. In the Application, the Proponent indicates it does not have updated monitoring in this area. This is highly problematic given the time interval between approval and the currently planned activation of the construction phase for Steensby.
Recommendation	Baffinland must provide updated detailed trend-over-time information for the full area where impacts resulting from the construction and operation of the Steensby components of the Project may be expected. Scope, methods, and results of this trend-over-time study must be verified with QIA, and it needs to include a substantive Inuit Qaujimajatuqangit component.

Comment Number	WL Renewal IR #23.
Issue	Environmental management plans
References	Appendix I – Baffinland's Response to QIA's Comments on Draft Application.
Recommendation	In comments 7-1 and 7-2 of Appendix I, Baffinland states that their management plans were developed through the use of their own IQ framework but provides no information describing precisely how IQ was used in the development of these plans. No information appears in the management plans themselves or summaries provided by Baffinland (Appendix L). In the NWB Water Licence Application Form Information Requirements document, Baffinland refers to several sections from its original 2012 water licence application, which did not incorporate adequate Inuit Qaujimajatuqangit.
	In the management and response plans appended to this current application, Baffinland mentions Inuit values and rights only in passing, in their policies sections. Inuit values and rights are not mentioned in the guiding principles sections, and certainly do not appear to have been used as guiding principles in the development of the plans. Aside from procedures for notifying QIA of an emergency, no specific Inuit values, perspectives, measures, waterbodies of value, or collaborative practices are mentioned in the body of the actual management and response plans.
	It is essential to ensure Inuit values are meaningfully considered in the development of all water-related response and management plans. This ensures that management and response plans are accountable to Inuit communities and address water-related concerns from an Inuit perspective. Inuit values should inform management priorities, activities, and responses.
	The Cover Letter states that Environmental Management Plans are provided for reference only, and not for approval as part of the licence renewal process". However, Section 19 of this water licence renewal application requires "a description of the measures incorporated into the project design to mitigate effects of the project on the quality, quantity, or flow of waters flowing through IOL." Adequate and up-to-date management plans are required as part of this licence renewal application and are therefore fully subject to comment from QIA in both the NWB and NIRB regulatory processes. Management plans must adequately address QIA concerns about water, both those that are outstanding from previous approval processes (where QIA concerns about impacts to Inuit water use and about the lack of IQ and Inuit input in their design were not adequately addressed) and those resulting from impacts and developments during the past 10 years of Project operation. QIA requests the NWB grant adequate time and appropriately rigorous process steps to consider the implications of these management plans for this water licence renewal application.
	QIA requires commitment from Baffinland to directly involve Inuit in adaptive management planning and design in which Inuit-led water monitoring results and Inuit responses inform management decisions and practices.
Recommendation	Baffinland must provide detailed information about how IQ was used in the development

of environmental management plans. Baffinland must also show how these plans were reviewed and approved by QIA and Inuit communities.