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50555 Sanikiluag Saniraiak

September 3, 2024

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

Email: licensing@nwb-oen.ca

Subject: QIA Follow-up on the Completeness Check of Water Licence Renewal Application No: 2A-**MRY1325** 

Dear Robert,

The Qikiqtani Inuit Association (QIA) reviewed Baffinland Iron Mines Corporation's (Baffinland or the Applicant) response to QIA's completeness check information requests (IRs) of the Renewal Application (the Application) for Water Licence No: 2AM-MRY1325 (the Licence). Enclosed please find the results of the review in Appendix A.

As outlined in Appendix A, QIA considers, for the purposes of determination of the completeness of this Application, four IRs resolved, three IRs partially resolved, seven IRs deferred to the technical review stage of the licensing process, and nine IRs unresolved. For the partially resolved and unresolved IRs, QIA would like to pursue provision of additional information by the Applicant on the following topics:

- Inuit engagement;
- Incorporation of Inuit Qaujimajatugangit;
- Inuit indicators and measures;
- 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;
- Cumulative effects, and
- Usage of up-to-date information.

Overall, QIA is pleased to see progress toward the formation of a complete application package.



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In addition, QIA would like to echo its July 26, 2024 correspondence to the Nunavut Water Board (the NWB or the Board) regarding several important issues.

#### Impacts to Freshwater Resulting from Sustaining Operations Proposal 2 and the existing Ι. **Project**

As QIA noted in its July correspondence, Baffinland filed Sustaining Operations Proposal 2 (SOP2) with the Nunavut Impact Review Board (NIRB). In its August 15, 2024 response to the completeness check IRs, the Applicant states that "... SOP2 does not propose any additional activities from those that have been carried out since 2018 and strictly looks to extend the duration of the 6 mpta operation." While QIA agrees that Baffinland does not seek to amend the scope of the licence, QIA notes that, in this instance, the duration of 6-Mtpa ore transportation via the northern corridor is significantly increased. Therefore, it is reasonable to assume increased impacts on freshwater, which ought to be considered in this licensing process.

In addition, QIA understands that it is the Board's practice to evaluate the performance and effects of a project to date even during processes where an applicant requests a renewal without any amendments to its licence. The Board then applies the findings and fine-tunes the conditions of a newly granted licence in accordance with the Board's mandate.

#### 11. Commencement of Activities at the Steensby Component

As understood from the Application and Sustaining Operations Proposal 2, the Applicant plans to commence the construction and operation of the Steensby Component in the near future. The Applicant expressed that, as these activities are included in the scope of the current Licence, they only should be considered in the context of management, monitoring and mitigation plans just prior to their commencement. QIA's view, however, is that the discussion of these activities should take place during this licensing process to determine whether the renewal licence (should it be issued by the Board) ought to include conditions tailored to the performance of these very activities.

# **Cumulative Effects Assessment**

In its July 26, 2024 correspondence to the NWB, QIA advised that "(t)he results of [the] Cumulative Effects Assessment for the Project [as directed by the Minister of Northern Affairs] may have bearing on the Licence, this Application, and future amendments". QIA is concerned by Baffinland's position that "(a) cumulative effects assessment is outside the scope of the Water Licence renewal". The cumulative effects in the regional study area have great potential to impact freshwater quality, quantity and flow and Inuit rights. QIA requests that the Board provide careful consideration to cumulative effects during this licensing process.



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QIA would like to thank the NWB for the opportunity to submit its feedback today. Please do not hesitate to contact QIA for any clarification.

Nakurmiik,

Assol Kubeisinova

Manager of Regulatory Review

Qikiqtani Inuit Association

# Appendix A QIA Completeness Check Comments

| <b>Comment Number</b> | 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.  |
| QIA Follow-up on      | Resolved.   |
| the Applicant's       |   |
| Response dated        |   |
| August 15, 2024       |   |

| Comment Number | WL Renewal IR #2.   |
|----------------|---|
| Issue          | Geographic scope of plans   |
| Reference      | <b>Document Name</b> : 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 impacts from project activities associated with the Steensby Component. Stations   |

| <b>Comment Number</b>                                | WL Renewal IR #2.   |
|--|---|
| Issue  | Geographic scope of plans   |
|  | 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.  |
|  | 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.  |
| QIA Follow-up on                                     | Unresolved.   |
| the Applicant's<br>Response dated<br>August 15, 2024 | The temporal scope of activities covered under SOP2 is proposed to continue until 2032 or when the Steensby Component becomes operational. While no changes to the Steensby Component have been proposed by Baffinland, the freshwater baseline available for the southern rail corridor and camp are now more than a decade old. The potential duration of SOP2 activities along the northern corridor is constrained in part by ensuring an up-to-date and relevant freshwater baseline for the Steensby component is available ahead of any construction activities. The updated baseline will be used to inform adaptive management triggers that may not provide sufficient protection to the aquatic environment if comparisons are made to a baseline characterization that is no longer applicable. |
|  | We reiterate our request outlined in this IR. The information is required prior to completing a technical review of aquatic monitoring plans such as the AEMP.  QIA recommends that Baffinland commit to provide a summary of available baseline information associated with the Steensby Component and rationale as to why updated baseline information is not required or, if an update to the baseline is indeed required, to provide that update on or before October 31, 2025.   |

| <b>Comment Number</b> | 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: |

| <b>Comment Number</b>             | WL Renewal IR #3.   |
|-----------------------------------|---|
| Issue                             | Proposed schedule   |
|                                   | 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   |
|                                   | 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. |
| QIA Follow-up on the Applicant's  | Resolved.   |
| Response Dated<br>August 15, 2024 | The addition of the years proposed for the beginning and end of the construction of the Steensby Component in brackets under "Construction" would make the details more complete; however, Baffinland's reply clarifies the proposed timing of construction and   |
|                                   | operation.  |

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

| <b>Comment Number</b> | WL Renewal IR #4.   |
|-----------------------|---|
| Issue                 | Absent summary of existing data   |
|                       | 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.  |
| QIA Follow-up on      | Unresolved.   |
| the Applicant's       |   |
| Response Dated        | Attachment 2 summarizes data and exceedances from a single year (2023), stating that        |
| August 15, 2024       | QA/QC checks of the data need to be performed on historical data before it can be           |
|                       | included in the EQuIS database. Baffinland instead has referred QIA to the annual reports   |
|                       | for all other water quality data. This falls far short of the IR to summarize aquatic       |
|                       | environmental data collected to date.   |
|                       | It is unclear what QA/QC of historical data are preventing their inclusion from Attachment  |
|                       | 2, as it would be expected that QA/QC steps would have taken place prior to the drafting    |
|                       | and submission of each annual report.   |
|                       | We request that the information from our IR (QIA-4) be provided prior to moving forward     |
|                       | with the technical review on the Application.   |

| <b>Comment Number</b> | 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  |

| <b>Comment Number</b>             | WL Renewal IR #5.  |
|-----------------------------------|--|
| Issue                             | Management plans   |
| 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 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. |
| QIA Follow-up on                  | Unresolved.  |
| the Applicant's                   | As indicated in OIA 4. Paffinland must first devalor a surrenament historical data allowing  |
| Response Dated<br>August 15, 2024 | As indicated in QIA-4, Baffinland must first develop a summary of historical data allowing the Applicant to demonstrate compliance with water licence terms and conditions and EIS predictions. Once an understanding of compliance with licence terms and conditions, including EIS predictions, has been demonstrated, both Baffinland and other stakeholders will have an understanding of which management plans need to be updated as part of this process. As updates to management plans may still be required pending Baffinland's   |

| <b>Comment Number</b> | WL Renewal IR #5.   |
|-----------------------|---|
| Issue                 | Management plans  |
|                       | response to QIA-4, it remains unclear whether sufficient information has been presented     |
|                       | to proceed with the full technical review. Plans associated with effects pathways that have |
|                       | not been managed in accordance with the Water Licence and EIS predictions must be           |
|                       | updated as per this IR and submitted for stakeholder review as part of these proceedings.   |

| cument Name: Appendix I Baffinland's Response to QIA's Comments on Draft plication; pendix A4 2023 Water Quality Model Update, Waste Rock Facility Report; pendix L3 – Surface Water and Aquatic Ecosystem Management Plan etion: 12-3  ge: 5  part of QIA's review of Baffinland's draft water licence application, we requested an elated "water and load balance model for all discharges and interactions with the latic environment that incorporates updated baseline data (relative to the existing)   |
|---|
| polication; pendix A4 2023 Water Quality Model Update, Waste Rock Facility Report; pendix L3 – Surface Water and Aquatic Ecosystem Management Plan etion: 12-3 ge: 5 part of QIA's review of Baffinland's draft water licence application, we requested an elated "water and load balance model for all discharges and interactions with the elatic environment that incorporates updated baseline data (relative to the existing)  |
| pendix L3 – Surface Water and Aquatic Ecosystem Management Plan  tion: 12-3  ge: 5  part of QIA's review of Baffinland's draft water licence application, we requested an dated "water and load balance model for all discharges and interactions with the latic environment that incorporates updated baseline data (relative to the existing)   |
| tion: 12-3 ge: 5 part of QIA's review of Baffinland's draft water licence application, we requested an dated "water and load balance model for all discharges and interactions with the natic environment that incorporates updated baseline data (relative to the existing   |
| ge: 5  part of QIA's review of Baffinland's draft water licence application, we requested an dated "water and load balance model for all discharges and interactions with the natic environment that incorporates updated baseline data (relative to the existing   |
| part of QIA's review of Baffinland's draft water licence application, we requested an dated "water and load balance model for all discharges and interactions with the natic environment that incorporates updated baseline data (relative to the existing  |
| dated "water and load balance model for all discharges and interactions with the natic environment that incorporates updated baseline data (relative to the existing  |
| nce), climate change predictions extending through and past the requested licence ration and includes model validation using project data collected over the previous ter licence period."  finland has declined to provide this information indicating "runoff from the waste rock ility is treated without long-term storage or recycle before discharge. Similarly, the ious sedimentation ponds across the site focus on simple removal of total suspended as (TSS) prior to discharge to the environment. There is no need for a water and load cance to predict make-up water requirements, or changes to effluent chemistry over the due to recycling or storage with tailings."  acknowledge that tailings are not present on site and that an updated water quality del has been provided within the Waste Rock Management Plan; QIA submitted ments on that model as part of our submission on the 2023 Mary River Annual Report the NWB.  remain concerned, however, about whether the water treatment plant will be able to strinue meeting effluent quality criteria over the licenced period given the progression climate change and the more rapid deposition of waste rock stemming from the going 6 Mtpa processing rate. While the water quality model for the WRF has recently an updated using water quality during the accelerated processing rate in recent years, oes not appear to have incorporated more recent climate change predictions and the atter volume of waste rock that may be exposed to weathering over the coming 15-year |
| nce period.   |
| wishes to refine our request to Baffinland to update the WRF water quality model, the 2023 Water Quality Model Update, Waste Rock Facility Report) to expressly   |
|   |

| <b>Comment Number</b> | WL Renewal IR #6.   |
|-----------------------|---|
| Issue                 | Modeling  |
|                       | 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. |
| QIA Follow-up on      | Partially resolved.   |
| the Applicant's       |   |
| Response Dated        | The Applicant has committed to updating the WQ model as requested by QIA. The timeline                    |
| August 15, 2024       | of that commitment (i.e., by November 1, 2024) indicates that a review of the updated                     |
|                       | WRF water quality model can be completed as part of the technical review of this                          |
|                       | application. We suggest Baffinland provide the updated model as soon as feasible (i.e.,                   |
|                       | ahead of the November 1, 2024 deadline). We also request the NWB to provide sufficient                    |
|                       | time for stakeholders to complete a review of that model.   |
|                       | However, our request that the model be used to update the SWAEMP has not been                             |
|                       | addressed in the reply. Can Baffinland commit to addressing this component of the IR as                   |
|                       | part of their planned submission on or before November 1, 2024? Note that the SWAEMP                      |
|                       | may require additional updates as per QIA-4 and QIA-5.  |

| <b>Comment Number</b> | WL Renewal IR #7.   |  |  |
|-----------------------|---|--|--|
| Issue                 | Professional judgement in TARPs   |  |  |
| Reference             | <b>Document Name</b> : Appendix L3 Surface Water and Aquatic Ecosystem Management Plan          |  |  |
|                       | <b>Section</b> : Table 9-2 - Trigger Action Response Plan - Erosion and Sediment Release Events |  |  |
|                       | <b>Page</b> : 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 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.   |  |  |

| <b>Comment Number</b> | WL Renewal IR #7.   |  |  |
|-----------------------|---|--|--|
| Issue                 | Professional judgement in TARPs   |  |  |
|                       | 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.  |  |  |
| QIA Follow-up on      | Unresolved.   |  |  |
| the Applicant's       |   |  |  |
| <b>Response Dated</b> | QIA acknowledges Baffinland's commitment to address the issue identified with the   |  |  |
| August 15, 2024       | SWAEMP Trigger Action Response Plan (TARP). However, we respectfully disagree that the request is outside the scope of the Licence. The SWAEMP is a key plan in the |  |  |
|                       | management of the aquatic ecosystem, and the TARP plays a central role in correcting  |  |  |
|                       | environmental interactions that deviate from the expected conditions. We continue to  |  |  |
|                       | recommend that a discussion on the TARPs be included in these proceedings and initiated   |  |  |
|                       | through the removal of professional judgement from the process of adaptive  |  |  |
|                       | management.   |  |  |

| <b>Comment Number</b> | WL Renewal IR #8.   |
|-----------------------|---|
| Issue                 | Water withdrawal limits and restrictions  |
| Reference             | Document Name: Appendix L4 Fresh Water Supply, Sewage, and Wastewater                         |
|                       | Management Plan (FWSSWMP)   |
|                       | Section: Table 3 Water Use Authorized for Dust Suppression Along the Tote Road                |
|                       | <b>Page</b> : 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.  |
| QIA Follow-up on      | Partially Resolved.   |
| the Applicant's       |   |
| Response Dated        | We appreciate the broader context from Baffinland. Would Baffinland be comfortable            |
| August 15, 2024       | constraining the list of water withdrawal locations to those sources that are considered      |
|                       | "large" and do not have tighter withdrawal restrictions (i.e., the ones that were not used    |
|                       | in 2023)?   |

| <b>Comment Number</b> | 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                                      |
|                       | <b>Page</b> : 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                       |
|                       | 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).  |
| QIA Follow-up on      | Partially Resolved.   |
| the Applicant's       |   |
| Response Dated        | Baffinland's reply does not clarify why the discharge of contact water is not subject to the            |
| August 15, 2024       | MDMER.  |
|                       | MDMER defines Effluent as "any seepage or surface runoff containing any deleterious                     |
|                       | substance that flows over, through or out of the site of a mine." The Milne Port site has               |
|                       | been built to store and ship mined ore and is clearly a part of the project's necessary infrastructure. |
|                       | The 2021 Annual Report, when discussing Steensby Port discharge to the marine                           |
|                       | environment, states that "(p)rovided that crushing and screening of ore does not occur at               |
|                       | Steensby Port, the MDMER would not be applicable to effluent discharged to marine                       |
|                       | waters". Further, the 2021 Annual Report states that "(o)nce ore processing (or "milling"               |
|                       | as defined in the MDMER) occurs at Milne Port, the MDMER will apply to effluent                         |
|                       | discharged from the ore stockpiles to the marine waters of Milne Inlet". Acknowledging                  |
|                       | that this statement is made with respect to the Phase 2 expansion that is not moving                    |
|                       | forward, the language appears to imply that the MDMER does not apply to effluent                        |
|                       | discharge from sites where milling is not taking place.   |
|                       | It is unclear to QIA why the MDMER would not apply in the absence of local / on-site                    |
|                       | milling.  |
|                       | Please provide the rationale as to why MDMER does not apply to Milne Port.                              |

| <b>Comment Number</b> | WL Renewal IR #10.   |  |
|-----------------------|--|--|
| Issue                 | Missing TARP in FWSSWMP                                      |  |
| Reference             | Document Name: Appendix L8 Aquatic Effects Monitoring Plan;  |  |
|                       | Appendix L4 FWSSWMP  |  |
|                       | Section: Table 5.2 TARP Table                                |  |
|                       | <b>Page</b> : P66  |  |
| Discussion            | Baffinland includes the following section in the TARP table: |  |

| <b>Comment Number</b> | WL Renewal IR #10.  |   |  |                             |  |            |
|-----------------------|---|---|--|-----------------------------|--|------------|
| Issue                 | Missing TARP in FWSSWMP   |   |  |                             |  |            |
|                       | TABLE 5.2 TRIGG   | TABLES 2 TROCER ACTION RESPONSE (TABY) TABLE  |  |                             |  |            |
|                       | Monitoring Plan   | Objective   | Performance Indicators   | Activity Being<br>Monitored | Threshold/ Pre-defined Response(s)   |            |
|                       |   | Detect short-term   | Deleterious substances (As, Cu,  | Mine effluent               | Low Risk Moderate Risk High Risk Low Risk Moderate Risk High Risk  Addressed in the Fresh Water Spools, Sewage and Whatewater Management Plan  |            |
|                       | MDMER Effluent<br>Monitoring  | and long-term<br>effects of the<br>Project's activities   | Pb, Ni, Zn, TSS, Ra-226) and pH  Acute Lethality Testing: Rainbow trout, Dayhnis magns  Effuent characterization: hardness, alkalinity, EC, temperature, Al, Cd, Fe, Hg, Mo, Se, NO, Ni, Cl, Cr, Co, SO <sub>b</sub> , Ti, U, P, Min, NH-N |                             | Addressed in the Fresh Water Supply, Sewage and Wastewater Management Plan   |            |
|                       |   | on the aquatic<br>environment<br>resulting from the<br>Project<br>Evaluate the<br>accuracy of               |  |                             | Addressed in the Fresh Water Supply, Sonage and Wastewater Management Plan<br>Note there are hig and be discharge limits in effluent characterization that trigger a fish tissue study, if exceeded? |            |
|                       | MDMER Effluent<br>and Water Quality<br>Monitoring Studies                       | impact<br>predictions<br>Assess the<br>effectiveness of   | Sublethal toxicity testing (fish<br>and/or invertebrate and/or<br>macrophyte and/or algal species)   |                             | Addressed in the Fresh Water Supply, Sewage and Wastewater Management Plan   |            |
|                       | multioning scores   | planned<br>mitigation<br>measures<br>identify additional<br>mitigation<br>measures to avert                 | Water Quality Monitoring at<br>exposure and reference areas:<br>temperature, dissolved oxygen,<br>pH, hardness, alkalinity, EC,<br>salinity (marine only), deleterious   |                             | Receiving water quality subject to the ABAMP benchmarks established for the CREAMP (see below)   |            |
|                       | We n  | ote 1   | that issu  | es wi                       | th MDMER monitoring and compliance are deferre   | d to the   |
|                       | FWSS  | WMF   | . Howev  | er, no                      | TARP table is present in the FWSSWMP to provide of   | clarity on |
|                       | what  | thre  | sholds a   | nd p                        | re-defined responses may be appropriate to hand  | le issues  |
|                       | perta   | ining   | to MDM   | ER <i>"e</i>                | ffluent monitoring" and "effluent and water quality m  | onitoring  |
|                       | studie  | ?s".  |  |                             |  |            |
| Recommendation        | Please  | Please update the FWSSWMP to include the referenced thresholds and predefined                               |  |                             |  | redefined  |
|                       | respo   | nses  | for issue  | s witl                      | n MDMER effluent monitoring, and effluent and water  | er quality |
|                       | -   | monitoring 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. |   |  |                             |  |            |
| QIA Follow-up on      | Resol   | ved.  |  |                             |  |            |
| the Applicant's       |   |   |  |                             |  |            |
| Response Dated        |   |   |  |                             |  |            |
| August 15, 2024       |   |   |  |                             |  |            |

| <b>Comment Number</b> | WL Renewal IR #11.  |  |  |  |  |
|-----------------------|---|--|--|--|--|
| Issue                 | Camp Lake water quality   |  |  |  |  |
| Reference             | <b>Document Name</b> : Mary River Project Application and Supporting Information to Renew |  |  |  |  |
|                       | Type A Water Licence 2AM-MRY1325  |  |  |  |  |
|                       | Section: 5.1  |  |  |  |  |
|                       | <b>Page</b> : 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."  |  |  |  |  |
|                       | 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   |  |  |  |  |

| <b>Comment Number</b> | WL Renewal IR #11.   |  |  |
|-----------------------|--|--|--|
| Issue                 | Camp Lake water quality  |  |  |
|                       | 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.                         |  |  |
| QIA Follow-up on      | Deferred.  |  |  |
| the Applicant's       |  |  |  |
| Response Dated        | QIA will defer further comments to the technical phase of the process.                     |  |  |
| August 15, 2024       |  |  |  |

| <b>Comment Number</b> | WL Renewal IR #12.  |
|-----------------------|---|
| Issue                 | KM105 Pond  |
| Reference             | Document Name: Appendix L4 FWSSWMP  |
|                       | Section: 7.2.5  |
|                       | <b>Page</b> : 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?   |
| QIA Follow-up on      | Deferred.   |
| the Applicant's       |   |
| Response Dated        | QIA will defer further comments to the technical phase of the process.                    |
| August 15, 2024       |   |

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

| <b>Comment Number</b> | 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.                  |  |  |
| QIA Follow-up on      | Deferred.  |  |  |
| the Applicant's       |  |  |  |
| Response Dated        | QIA will defer further comments to the technical phase of the process.                   |  |  |
| August 15, 2024       |  |  |  |

| <b>Comment Number</b> | WL Renewal IR #14.   |  |  |
|-----------------------|--|--|--|
| Issue                 | CREMP early detections of mine water quality influence                                     |  |  |
| Reference             | Document Name: Appendix L4 FWSSWMP   |  |  |
|                       | Section: 7.0   |  |  |
|                       | <b>Page:</b> 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?  |  |  |
| QIA Follow-up on      | Deferred.  |  |  |
| the Applicant's       |  |  |  |
| Response Dated        | QIA will defer further comments to the technical phase of the process.                     |  |  |
| August 15, 2024       |  |  |  |

| <b>Comment Number</b> | WL Renewal IR #15.   |
|-----------------------|--|
| Issue                 | Stormwater management pond reclamation                                   |
| Reference             | <b>Document Name</b> : Appendix L10 Interim Closure and Reclamation Plan |

| <b>Comment Number</b> | WL Renewal IR #15.   |  |
|-----------------------|--|--|
| Issue                 | Stormwater management pond reclamation   |  |
|                       | Section: Table 1.1 "Outline Of Major Reclamation Activities at Each Mine Area"           |  |
|                       | <b>Page:</b> 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.   |  |
| Recommendation        | Please provide the methodologies proposed for reclamation and decommissioning of         |  |
|                       | stormwater and other treatment ponds upon mine closure.                                  |  |
| QIA Follow-up on the  | Deferred.  |  |
| Applicant's Response  |  |  |
| Dated August 15,      | QIA will defer further comments to the technical phase of the process.                   |  |
| 2024                  |  |  |

| 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 Fisheries Act Authorizations applications and the annual Water Licence reports. However, the Fisheries Act 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 Baffinland's 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.

# QIA Follow-up on the Applicant's Response Dated August 15, 2024

Unresolved.

Baffinland's responses to concerns raised by Inuit during engagement with Inuit communities from 2014 to 2024 (Attachment 4 Freshwater Environment Engagement Comments) contain insufficient evidence of action and follow-up on information received from Inuit describing potential impacts to Inuit freshwater resource use, including the following issues:

- 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;
- Ship ballast exchange in incorrect locations;
- Seismic testing;
- Reduced caribou populations;
- Improper blasting procedures impacting wildlife; and
- Culverts impacting ice breakup and fish populations.

There are instances where Baffinland's conclusions differ from Inuit observations and the discrepancies are not addressed or accounted for:

- Negligible impacts to country foods (p. 5); and
- No changes in water quality, sediment, or fish around the site or marine environment (p. 6).

Baffinland does not address Inuit concerns raised in other publicly available sources, such as the Tusagtavut studies. Such concerns include but are not limited to:

- Avoidance by Inuit due to physical changes and disturbance in the Project footprint and a greater than predicted "impact footprint" surrounding the PDA (roads, mine site, etc.);
- Avoidance due to concerns about other contaminants;

- Reduced water quality due to erosion, sedimentation, chemical runoff, road construction and maintenance; water discharge and withdrawals; stream modification, etc.;
- Increased hunting effort resulting from need to carry larger quantities of water while on the land;
- Altered fish passage due to water withdrawals and discharge, snow management, stream modifications and culverts;
- Fish habitat loss due to algal bloom, chemical runoff, dust deposition, erosion and sedimentation, and stream alteration;
- Marine effects on anadromous fish including increased predation; invasive species; shipping disturbance; and sediment quality changes;
- Reduced enjoyment of land; and
- Reduced ability to transmit knowledge about land and water use and to conduct cultural practices.

Several responses from Baffinland in Attachment 4 refer to monitoring results in annual reports and do not address the comment or assess whether there is need for further investigation.

Some comments in Attachment 4 address Inuit concerns about impacts by stating reliance on management plans that were not developed using Inuit knowledge, values, objectives, indicators and response (p. 7-8).

Other comments in Attachment 4 state that feedback is incorporated elsewhere (e.g., a *Fisheries Act* Authorization application) but not delineated here (p. 11, July 11, 2023). A summary of meetings with responses stating that concerns were addressed elsewhere is not sufficient.

Baffinland responds to some comments from community members by stating adherence to requirements set by non-Inuit agencies and organizations that do not consider Inuit use, objectives, or measures (p. 12-13, November 28, 2023).

Baffinland also responds to Inuit concerns by stating that IQ was used to identify fish presence in the local area (p. 7, 2019 Summary; p. 13, December 1, 2023). However, Baffinland does not provide a source for this.

# **Recommendations:**

1. Baffinland should provide more detailed evidence of how all Inuit concerns about impacts to freshwater heard by Baffinland, including but not limited to those outlined above, are being proactively addressed through project design, mitigation, monitoring, and response measures. Concerns about freshwater impacts should be addressed in detail and with concrete measures demonstrating how the concerns are appropriately accounted for. Baffinland's understanding of and responses to Inuit concerns should be well-researched and holistic, supported by available Inuit Qaujimajatuqangit and verified by impacted Inuit communities.

| 2. | This information should include concerns raised in public consultation sessions as well as publicly available documents, including all three Tusaqtavut studies produced by QIA to date.  Baffinland makes multiple references to its 2024 Country Foods Human Health Risk Assessment material. If this material is in any way relevant to the NWB Water Licence process, Baffinland should provide this material directly to the NWB, if this has not occurred already. If Baffinland does not consider it material to this licensing |
|----|--|
|    | process, please provide a supporting rationale for this perspective.   |

| 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.   |
| QIA Follow-up on<br>the Applicant's<br>Response Dated<br>August 15, 2024 | Deferred.  QIA will defer further comments to the technical phase of the process.   |

| 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.

# QIA Follow-up on the Applicant's Response Dated August 15, 2024

Deferred.

While QIA is not the proponent and water licence holder, QIA has indeed taken on a leading role in gathering information from Inuit, given previous gaps in the integration of Inuit perspectives on topics like this one. QIA is in the process of finalizing an IQ Water Values Study with Pond Inlet, that should be used to inform the NWB's assessment of this water licence application. QIA will share this document with the NWB and Baffinland when it is completed.

At the same time, QIA reiterates that the information provided by Baffinland in its Appendix J, though appreciated as a gesture to include Inuit Qaujimajatuqangit as part of

this Application, fails to adequately portray or summarize *available* Inuit Qaujimajatugangit on freshwater use and especially potential impacts:

- Tusaqtavut studies, which have identified existing impacts from the following non-exclusive impact pathways:
  - Increased contamination of snow, ice, and water bodies from dust caused by Project components associated with the mine and the Tote Road;
  - 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 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 fish health due to dust contamination of water and fish habitat; and
- Community feedback received during the NWB and NIRB public meetings;
- Baffinland's own engagement events

Existing information, much of which appears in the same sources referenced in Baffinland's Appendix J, contains valuable information on waterbodies of importance in the Project-affected area and, perhaps more importantly, describes valid Inuit concerns about and experiences of impacts that have already occurred as a result of the Project and are likely to continue occurring and cumulatively impacting Inuit culture, resources, and land use. These issues must be considered in this Water License Application.

QIA will seek to work directly with Baffinland to identify how to fill gaps in the application materials, during the technical phase of the process, and inform the NWB with status updates, including a focus on flagging all the valid impact pathways from the Project on freshwater, fish, fish habitat and fishing.

| 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

# QIA Follow-up on the Applicant's Response Dated August 15, 2024

#### Unresolved

In its response, Baffinland suggest that it "believes the IQ and Inuit Knowledge reflected in Appendix J is sufficient context for the NWB's consideration of the Type A Water License renewal".

QIA disagrees with Baffinland on this matter. Appendix J and Baffinland's Application as a whole do not include information on impacts to waterbodies of importance and Inuit water use from an Inuit perspective using Inuit indicators and measures. The NWB has publicly committed to and has applied, in its licences, considering Inuit Qaujimajatuqangit alongside Western scientific knowledge regarding impacts to freshwater. This information must be collected and analyzed using Inuit indicators and measures. Effects must also be characterized from an Inuit perspective, which may differ from a Western scientific perspective. For example, a Western science perspective may set the threshold for ecological relevance at "does the impact change things in a way that fundamentally alters the basin", which may mask localized effects that could impact both on the local environment and on the rights of Inuit. QIA will provide the Pond Inlet IQ Water Values Study to the NWB.

# **Recommendations:**

1. QIA requests that Baffinland work with QIA to review the results of the

|    | forthcoming Pond Inlet Water Values Study and integrate those results into revised application material, especially but not exclusively related to monitoring and management commitments tied to the water licence. QIA requests that   |
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| 2. | Baffinland commit to developing a supplemental joint submission to the NWB provided QIA finalizes the Pond Inlet Water Values Study by March 31, 2025. QIA requires more information about whether the Aquatic Effects Monitoring Plan (AEMP) properly captures all areas in the PDA, including to the south towards Steensby and whether Inuit have been involved in defining the monitoring locations and nature of monitoring required, for different waterbodies. |

| 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.  |
| QIA Follow-up on<br>the Applicant's<br>Response Dated<br>August 15, 2024 | In its response, Baffinland suggests that "a cumulative effects assessment is outside the scope of the Water Licence renewal". However, QIA is not asking for anything in its recommendation that is not required in the NWB's own application form. Section 17 of the NWB's application form asks the applicant to "Describe direct, indirect, and <i>cumulative</i> [environmental] impacts related to water and waste" (p. 11, emphasis added). Baffinland's response to this question relies on outdated information from the 2012 FEIS and 2013 Addendum about cumulative effects (ibid.). This information was considered inadequate by QIA in the first place for its highly limited scope, in which only impacts directly overlapping with the Project (i.e., occurring at the same time and in the |

same location) were considered as cumulative effects. Additionally, this information is now 11 years old, meaning that the Proponent's application cannot account for impacts that have occurred in the intervening years as a result of this and other activities or processes on Baffin Island. Baffinland has provided no additional information with its application to update the cumulative effects assessment. Impacts to Inuit water rights (Section 19 of the NWB's application form) also cannot be accurately evaluated without considering the full range of past, present, and likely future impacts on Inuit rights. Information on cumulative effects is also required as part of the NIRB process for Baffinland's SOP2 application and should be provided with this NWB application as well.

#### **Recommendations:**

- 1. Baffinland should include an updated description of cumulative effects on water quality, quantity and flow in its Application, that shows that Baffinland has been properly tracking cumulative effects over the past decade or more.
- 2. QIA also recommends that, should this water licence application be approved, the NWB integrate the results of the forthcoming and NIRB-overseen cumulative effects assessment.

| 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.   |
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| Recommendation   | Baffinland 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.   |
| QIA Follow-up on<br>the Applicant's<br>Response Dated<br>August 15, 2024 | Unresolved  QIA acknowledges the inclusion of some recent information regarding monitoring results and Inuit Qaujimajatuqangit. For clarity, our comment pertains to a general over-reliance on outdated information in the Water Licence Application for Baffinland's conclusions and responses about impacts and changes to conditions. As explained in other comments, the information provided by Baffinland, including in the 2012 FEIS, the 2013 Addendum, and the supplements provided with this application, does not accurately describe all impacts to freshwater conditions and Inuit water rights. The Proponent's responses and conclusions in the Application have not been updated through the use of accurate, up-to-date information, especially (but not limited to) the Steensby area, which has not undergone adequate IQ-enriched monitoring for changes since Baffinland's original licence was awarded.  QIA disagrees with the statement that there has been no meaningful change in the conditions of the receiving environment, especially as it pertains to Inuit water rights and use. The reality is that to our knowledge, not enough IQ-informed data has been collected to support such an assertion. Baffinland states in its response that "Baffinland has been conducting field work in the freshwater environment around Steensby Component infrastructure continuously since 2021 to support activity specific permits, including Fisheries Act Authorizations. 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." All parties need to understand better how IQ enriched data collection was included in this "continuous field work in the freshwater environment around Steensby" since 2021. All parties must be provided with the results of that IQ-enriched data collection for consideration, if it was conducted. If it was not conducted, Baffinland should recognize the lack of a dedicated IQ data collection program since 2021 a |

| <b>Comment Number</b> | WL Renewal IR #22. |
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| 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.   |
| QIA Follow-up on<br>the Applicant's<br>Response Dated<br>August 15, 2024 | Further information is required to reconcile divergent statements made by Baffinland in the Application and in its responses. In the Application (Table 5.1 at pg. 7 of 19) Baffinland states that for the following Steensby Component Infrastructure areas, "These water sources are unaffected by the current Project and thus no updated water quality monitoring data is available": ST 347 KM 10 Lake, 3 KM Lake, Nivek Lake, Ravn Camp Lake, and Cockburn Lake. In its responses to QIA's completeness comments, Baffinland states that it has been doing "continuous field work in the freshwater environment around Steensby" since 2021 that suggest there has been "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." This may be a terminological issue that Baffinland can clear up or the statements may be contradictory; clarification is necessary.  The fact there is "no updated water quality monitoring data" available for the noted waterbodies remains concerning to QIA, especially considering Baffinland's suggestion that there have not been meaningful changes in the receiving environment since the 2012 EIS.  Recommendations:  1. Please clarify the two potentially divergent statements noted above.  2. QIA echoes its recommendation following the Applicant's August 15 response to comment No. QIA-2. |

| 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 Qaujimajatugangit.

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.

# QIA Follow-up on the Applicant's Response Dated

Resolved.

QIA is committed to working with Baffinland in a bilateral forum to bring greater clarity

| August 15, 2024 | on the applicability of the Adaptive Management Plan to the NWB Water Licence process.  QIA will provide an update to the NWB. |
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