March 19, 2021



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Manager of Licensing **Nunavut Water Board** P.O. Box 119, Gjoa Haven Nunavut, XOB 1J0

Re: Baffinland Iron Mines Corporation's Type 'B' Water Licence 2BE-MRY1421 Renewal Application for the Mary River Exploration Project – Reply to Responses

Richard,

The Qikiqtani Inuit Association (QIA) has completed a review of Baffinland Iron Mines Corporation's (Baffinland) response to comments¹ submitted to the Nunavut Water Board (NWB) on March 12, 2021. QIA initially submitted 25 Technical Comments for the consideration of the NWB.

Following the receipt of Baffinland's responses, QIA has no further concerns with the following: QIA-01, QIA-02, QIA-03, QIA-05, QIA-09, QIA-10, QIA-14, QIA-15, QIA-16, QIA-17, QIA-19, QIA-20, QIA-21, QIA-22, QIA-23 and QIA-25. Updates to remaining comments are provided for the consideration of the NWB, Baffinland and interested intervenors (see Appendix).

Sincerely,

Chris Spencer

Manager, Regulatory Affairs

cc: Christopher Murray, Baffinland

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¹ Baffinland (2021). Re: Responses to Intervenor Comments – Application for the Renewal of Baffinland's Type 'B' Water Licence No. 2BE-MRY1421. March 12, 2021.

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Appendix – Updated Technical Comments

ID:	QIA-04
Reference:	Project Description
Comment:	Baffinland states in section 8: "Baffinland will dispose of all drill waste, including water, chips, muds and salts (Calcium Chloride CaCl ₂), from land-based drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty-one (31) metres from the ordinary high-water mark of any adjacent waterbody, where direct flow into a water body is not possible and no additional impacts are created." QIA has previously expressed concerns with drill waste not being appropriately contained in a sump and instead flowing onto the surrounding land.
Updated Comment:	QIA maintains that an additional term will ensure appropriate environmental management practices are followed during exploration drilling activities.
Updated Request:	QIA maintains the request for the NWB to include the following term (Section 26(1)(g) Item 31) from the Evrim Exploration Canada Corp. Exploration Licence in the Type 'B' Water Licence: "The Permittee shall not allow any Drilling Waste to spread to the surrounding lands and watercourses."

ID:	QIA-06
Reference:	Project Description
Comment:	Baffinland states in section 8: "If the bottom of the permanently frozen
	ground, or permafrost, is broken through by the drill, the depth of the
	bottom of permafrost and location should be reported in the annual report
	to the Board for data management purposes." The current Licence does not
	require Baffinland to report if an operator drills to the bottom of
	permafrost. It would also be beneficial to record the depth of the active
	layer to inform geotechnical recommendations.
Updated	QIA maintains that an additional term will ensure appropriate
Comment:	environmental management practices are followed during exploration
	drilling activities.
Updated	QIA requests for the NWB to include a term in the Type 'B' Water Licence
Request:	that requires Baffinland to report the following information when drilling:
	- Depth of the active layer
	- Depth of the bottom of permafrost
	- Location & Timing

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ID:	QIA-07
Reference:	Project Description
Comment:	Baffinland indicates in section 17 of the renewal application that predicted environmental impacts of the undertaking and proposed mitigation measures are the same as those considered in the existing water licence. Baffinland makes no reference to adaptive management in its delivery letter, application, or project description. Given the focus of adaptive management to mitigate environmental impacts at the Mary River Project in the recent Phase 2 regulatory process, the inclusion of objectives, indicators, thresholds, and responses would have been a positive measure to ensure consistency.
Requests:	QIA requests that objectives, indicators, thresholds, and responses intended to mitigate environmental impacts be included in the Spills Contingency Plan and Exploration Closure and Reclamation Plan.
Updated	QIA acknowledges the updates to the Exploration Closure and Reclamation
Comment:	Plan, but still maintains that additional edits are necessary to ensure appropriate environmental practices are undertaken during exploration activities.
Updated Request:	 QIA requests that Baffinland provide steps in which a root cause analysis is to be completed and perform a root cause analysis using historical data to identify common triggers and develop corresponding responses. This could be done as part of the amendment process or post-approval as a required update to the ESCP. QIA requests further detail that would encompass actions taken for progressive reclamation. This could be done as part of the amendment process or post-approval as a required update to the ECRP.

ID:	QIA-08
Reference:	Project Description
Comment:	Baffinland states in section 20 of the renewal application "Baffinland
	continues to consult with the North Baffin communities and organizations
	regarding, ongoing construction and operational activities at the Project,
	shipping season, progress regarding employment from the North Baffin
	communities, environmental monitoring activities and results, exploration
	activities and future phases of the Project. Baffinland's senior management
	team continued to participate in these meetings. The QIA and NWB Annual
	Report for Operations details a complete list of consultations and meetings

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	held with regulators, stakeholders, and the public by Baffinland. The
	renewal application states that Baffinland reports on consultation in the
	QIA and NWB Annual Report for Operations."
	The 2019 Type B Water Licence Annual Report refers to the 2019 Type "A" Water Licence Annual Report. Neither Annual Report provides outcomes of consultations regarding exploration activities or the areas licenced under the current Type "B" Water Licence. Furthermore, there is no list of concerns expressed and measures to address concerns.
Requests:	QIA requests a detailed summary of consultation meetings that relate to
	the locations licenced under the current Type "B" Water Licence, including a
	list of concerns expressed and measures Baffinland proposes to address
	concerns.
Updated	QIA has reviewed the QIA and NWB Annual Report for Operations and was
Comment:	unable to locate references to direct consultation related to exploration activities. Following discussion with Baffinland, the following commitment was offered to QIA via email correspondence:
	"Baffinland proposes that an annual pre-season update on the scope of the annual field program be distributed. This could be provided in written form to each hamlet and HTO/HTA, in particular the MHTO, in both English and Inuktitut. Additional in-person engagement could be integrated into regular project updates as required, or where questions from communities arise."
Updated Request:	QIA requests that this commitment be included as a new term in the Type 'B' Water Licence.

ID:	QIA-11
Reference:	Spill Contingency Plan
Comment:	The plan identifies that other hazardous materials, chemicals or wastes
	besides fuel, lubricants and oils will be present but does not identify
	approximate quantities (although types are listed in Appendix E), nor does it
	identify the likely spill scenarios and responses to be implemented. The plan
	notes that small volumes will limit the magnitude of spills that can occur.
	Nevertheless, a spill risk is potentially still present and should be further
	identified with appropriate responses for the contingency plan to be
	considered complete with regards to all types of spills that may occur.
Requests:	QIA requests that the approximate quantities of hazardous materials on site
	be identified, as well as an analysis of the most likely spill scenario and
	responses.

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Updated	QIA maintains that an analysis of the most likely spill scenario and
Comment:	responses is necessary.
Updated	QIA requests that Baffinland complete a root cause analysis using existing
Request:	data, and outcomes included in the ESCP. This could be done as part of the
	amendment process or post-approval as a required update to the ESCP.

ID:	QIA-12
Reference:	Spill Contingency Plan
Comment:	The plan identifies the potential for spills of untreated sewage but does not
	identify approximate quantities, nor does it identify a likely spill scenario
	and responses to be implemented. A spill analysis should be included for
	the contingency plan to be considered complete.
Requests:	QIA requests the approximate quantities of sewage generated onsite as
	well as an analysis of the most likely spill scenario and responses.
Updated	No further information.
Comment:	
Updated	QIA requests that Baffinland be required to provide plans for sewage
Request:	management as part of the application to construct satellite camps to the
	NWB. This submission should include spill scenarios and responses.

ID:	QIA-13
Reference:	Spill Contingency Plan
Comment:	Section 8.2 indicates sewage is to be disposed of in a latrine system, and greywater in a sump (if not directed to a sewage treatment facility) at a minimum distance of 31 m from water bodies. The 31 m distance was earlier identified as being consistent with the document "Design Rationale for Fuel Storage and Distribution Facilities" 3rd Edition 2006, published by the Department of Public Works of the Northwest Territories. Design guidelines for fuel storage are not likely to also be applicable to permanent disposal structures for sewage and greywater.
Requests:	QIA requests that further details should be provided on the design of the latrine and sump to indicate if the design conforms to available guidelines or standards for sewage/greywater disposal structures.
Updated	No further information.
Comment:	
Updated	See QIA-12.
Request:	

ID:	QIA-18
Reference:	Exploration Closure and Reclamation Plan

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Comment:	The Type B Water Licence Part I, Item 1 requires the Licensee to submit to the Board for approval within sixty (60) days following the issuance of this
	• • • • • • • •
	Licence, a revised, stand-alone, Closure and Restoration Plan prepared in
	accordance with applicable sections of the "Guidelines for Abandonment
	and Restoration Planning for Mines in the Northwest Territories (1990) and
	that must reflect the reduced scope of activities under this licence.
	However, sections of the Closure and Reclamation refer to the Interim
	Closure and Reclamation Plan for the Mary River Project for additional
	details, particularly for the closure and post-closure monitoring to be
	completed. Therefore, the water licence condition for a stand-alone
	document does not appear to be satisfied if the reader is required to refer
	to other documents for details on significant components of the closure
	plan for the exploration sites.
Requests:	QIA requests details on the closure and post-closure monitoring to be
	completed at the exploration sites. Proposed duration, frequency, locations,
	scope, sampling, and resource requirements should be provided to evaluate
	if closure criteria are being met and closure objectives achieved.
Updated	QIA understands that the scope of post-closure monitoring activities is
Comment:	anticipated to be minimal but maintains that the above request is
	reasonable and beneficial for reviewers and the Board.
Updated	No changes to original request.
Request:	

ID:	QIA-24
Reference:	Exploration Closure and Reclamation Plan
Comment:	The closure plan indicates sumps will be used for disposal of greywater. It is
	not clear how sewage will be managed.
Requests:	1. QIA requests additional detail regarding the number of sumps and
	estimated volume of sewage.
	2. Provide the location and design of sumps, and any applicable
	standards/guidelines they are to conform to with regards to design,
	operation, and closure.
	Detail sewage management practices.
Updated	No further information.
Comment:	
Updated	See QIA-12.
Request:	