Baffinland Iron Mines Corporation Mary River Project - Phase 2 Proposal Updated Application for Amendment No. 2 of Type A Water Licence 2AM-MRY1325

ATTACHMENT 2

Water Licence Amendment Application

(81 Pages)





Application for Water Licence Amendment

Application Submission Date: Sept 7, 2021

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عمه ۵۲ حمه ۱۹۵۹ م GJOA HAVEN, NU X0B 1J0 NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN KATIMAYIT OFFICE DES EAUX DU NUNAVUT

APPLICATION FOR WATER LICENCE AMENDMENT

The applicant is referred to the NWB's Guide 7: <u>Licensee Requirements Following the Issuance</u> of a Water Licence for more information about this application form.

Where possible, provide background information regarding the original licence application or attach previously submitted information.

EXISTING LICENCE NO: 2AM-MRY1325
1. LICENSEE CONTACT INFORMATION
Is the licensee the same as that referred to on the existing licence?
X Yes
If No, a licence assignment must be completed and approved by the NWB. An amendment will only be issued in the name of the current licensee in the absence of assignment of the licence.
If the licensee is the same, but the <u>name</u> of the licensee has changed, attach a certificate of name change.
Name:
Address:
Phone: Fax: e-mail:
2. LICENSEE REPRESENTATIVE CONTACT INFORMATION – If different from Block 1.
Name:
Address:
Phone: Fax: e-mail: (Attach authorization letter.)

3.	NAME OF DROJECT				
3.	NAME OF PROJECT				
Has the name of the project changed?					
			Yes	X No	
If Yes, i	ndicate the name of the	project including t	he name	e of the location:	
4.	LOCATION OF UNDE	RTAKING			
Does t	the proposed amendme	nt change the loca	tion of the	ne amended undertaking?	
			Yes	X No	
Provid	e the project extents an	d camp locations.	dentify p	proposed changes.	
Project	Extents				
NW:	Latitudo: (72º 05' 00" N	.1\	ongitudo	e: (77° 45' 00" W)	
NE:	Latitude: (72° 05' 00" N Latitude: (72° 05' 00" N			e: (81° 00' 00" W)	
SE:	Latitude: (69° 49' 00" N			e: (81° 00' 00" W)	
SW:	Latitude: (69° 49' 00" N			e: (77° 45' 00" W)	
Camp I	Location(s)				
Milne P	Port Camps:				
		71° 52' 53.06" N			
	ed Construction Camp				
	er Steensby Camp Rail Construction Camps	71° 52' 54.76" N	80° 54	4' 10.60" W	
Camp	•	71° 26' 54.06" N	2∩° 11'	1' 54 67" W	
Camp		71° 23′ 53.76″ N		9' 44.33" W	
	ite Camps:	71 20 00.70 1	70 40	7 44.00 W	
	ration Camp	71° 19' 30" N	79° 22'	2' 40" W	
	Site Complex (MSC)	71° 18' 50.39" N		7' 11.35" W	
	rik Camp	71° 18′ 51.93″ N	79° 18'	3' 9.08" W	
	Rail Construction Camps				
	River Camp	71° 07′ 49.25″ N		2' 2.76" W	
	Rail Camp	70° 58' 20" N		2' 15" W	
	Cockburn Camp	70° 34' 58.11" N 70° 27' 52.47" N		1' 28.80" W 2' 24.13" W	
	Cockburn Camp by Camps:	70 21 32.47 N	10 22	2 24.13 W	
New C		70° 19' 1.42" N	78° 25'	5' 48.6" W	
	ng Camp	70° 17' 40.55" N		9' 21.88" W	
5.	MAP				
Does th	ne proposed amendmen	t change the locati	ons of an	ny of the main components of the undertaking?	
	• •	5			
		L	Yes	X No	
Attach a	a topographical map, ind	dicating the main c	omponer	ents of the undertaking. Identify proposed changes.	
NTS Ma	ap Sheet No.: <u>37F, 37G</u>	<u>, 47H</u> Map Na	me:	Map Scale: <u>1:250,000</u>	
See Fig	jure 1 – Location of Proj	ect Activities (attac	ched)		

6. N	ATURE OF INTEREST IN THE LAND
Does the	proposed amendment change the nature of the interest in the land?
	☐ Yes X No
If Yes, inc	dicate changes.
	ny of the following that are applicable to the proposed undertaking (at least one box under the header must be checked).
Su	ub-surface
	Mineral Lease from Nunavut Tunngavik Incorporated (NTI) ate (expected date) of issuance: Date of expiry:
	Mineral Lease from Indian and Northern Affairs Canada (INAC) ate (expected date) of issuance: Date of expiry:
Sı	urface
	Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC) and Use Permit #N2019Q0011
Da	ate (expected date) of issuance: <u>June 20, 2019</u> Date of expiry: <u>June 29, 2024</u>
	Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA) ate (expected date) of issuance: Date of expiry:
] IOL Authorization from Kivalliq Inuit Association (KivIA) ate (expected date) of issuance: Date of expiry:
Х	IOL Authorization from Qikiqtani Inuit Association (QIA) Commercial Lease No. Q13C301
Da	ate (expected date) of issuance: _2021 Date of expiry: _Amended Lease
	Commissioner's Land Use Authorization ate (expected date) of issuance: Date of expiry:
	Other
Da	ate (expected date) of issuance: Date of expiry:
Is the nan licence?	me of the entity(s) holding authorizations the same as that considered in the existing water
	X Yes
If No, a lic	cence assignment must be completed and approved by the NWB.
Name of	entity(s) holding authorizations:

7.	NUNAVUT PLANNING COMMISSION	(NPC) DETERMINATION		
Indicate the land use planning area in which the existing project is located.				
	X North Baffin ☐ South Baffin ☐ Akunniq	☐ Keewatin ☐ Sanikiluaq ☐ West Kitikmeot		
Does t	he proposed amendment change the lar	d use planning area?		
		☐ Yes X No		
If yes,	indicate the land use planning area in wl	nich the amended undertaking is located.		
	☐ North Baffin ☐ South Baffin ☐ Akunniq	☐ Keewatin ☐ Sanikiluaq ☐ West Kitikmeot		
Was a		required from NPC prior to the issuance of the existing water		
		X Yes		
If Yes,	indicate date issued and attach copy.	May 16, 2014 letter from NPC (Attachment 4.1)		
Does	the proposed amendment change the or	ginal NPC conformity determination or the need to obtain one?		
		X Yes ☐ No		
If Yes,	indicate date issued (or expected) and	attach a copy. May 29, 2018 letter from NPC (Attachment 4.2)		
If No,	provide written confirmation from NPC co	onfirming that a land use plan conformity review is not required.		
8.	NUNAVUT IMPACT REVIEW BOARD	(NIRB) DETERMINATION		
Was a	screening determination required from I	NIRB prior to the issuance of the existing water licence?		
		X Yes		
If Yes,	, indicate date issued and attach copy. $_$			
Does one?	the proposed amendment change the or	ginal NIRB screening determination or the need to obtain		
		X Yes		
	indicate date issued (or expected) and a through coordinated NIRB/NWB Review			
If No,	provide written confirmation from NIRB o	confirming that a screening determination is not required.		

9. DESCRIPTION OF UNDERTAKING		
Does the proposed amendment change the description of the undertaking?		
☐ Yes X No		
List and attach plans and drawings or project proposal. Identify proposed changes.		
See the Supplemental Information in the Updated Application Document (Knight Piésold, 2021).		
10. OPTIONS		
Does the proposed amendment change any of the alternative methods and locations that were considered to carry out the project?		
☐ Yes X No		
Provide a brief explanation of the alternative methods or locations that were considered to carry out the project. Identify proposed changes.		
All following changes have been proposed under the Amendment to the Final Environmental Impact Statement (FEIS Amendment).		
Milne Port -expanded ore stockpiles and associated water management facilities -modifications to site drainage -rail offloading facilities -rail maintenance facility with oily water treatment facilities -new landfill -construction and operation of a second ore dock		
Mine Site -an additional 30ML of fuel storage within an existing tank farm -new rail stockyard (crushing and screening, stockpiles, rail loadout facility) -run-off management		
North Rail and Tote Road -additional railway crossings including bridges, bank alterations, culverts, and erosion control -minor realignments along the Tote Road, requiring additional culverts -additional water sources for dust suppression		
See the Supplemental Information in the Updated Application Document (Knight Piésold, 2021).		

11.	CLASSIFICATION OF PRIMARY UNDERTAKE	NG
Indica boxes	•	the existing licence by checking one of the following
	☐ Industrial X Mining and Milling (includes exploration/drilling)	☐ Agricultural g/exploration camps)
	☐ Conservation☐ Municipal (includes camps/lodges)☐ Power	☐ Recreational ☐ Miscellaneous (describe below): ————————————————————————————————————
Does t	he proposed amendment change the classification	on of primary undertaking?
	□Yes	X No
If Yes,	indicate the primary undertaking of the amendment	ent:
	nation in accordance with applicable Supplementated with an Application for Amendment. Indicate	al Information Guidelines (SIG) must be updated and which SIG(s) are applicable to your application.
	 ☐ Hydrostatic Testing ☐ Tannery ☐ Tourist / Remote Camp ☐ Landfarm & On-Site Storage of Hydrocarbon ☐ Onshore Oil and Gas Exploration Drilling ☐ Mineral Exploration / Remote Camp ☐ Advanced Exploration X Mine Development ☐ Municipal X General Water Works ☐ Power 	Contaminated Soil
12.	WATER USE	
Indicat	e, using the boxes below, the types of water use	(s) approved in the existing licence.
	X To obtain water for camp/ municipal purposes X To obtain water for industrial purposes X To cross a watercourse X To alter the flow of, or store water Other:	X To divert a watercourse X To modify the bed or bank of a watercourse Flood control
Does	the proposed amendment change the type(s) of v	vater use(s)?
	☐ Yes	X No
	indicate using the boxes below, the proposed che that are to be added, continued, or removed.	ange(s) to the type(s) of water use(s) noting any water
	☐ To obtain water for camp/ municipal purposes☐ To obtain water for industrial purposes☐ To cross a watercourse☐ To alter the flow of, or store water☐ Other:	s To divert a watercourse To modify the bed or bank of a watercourse Flood control

13. QUANTITY OF WATER INVOLVED
Does the proposed amendment change the source of water? X Yes No
Indicate the water source(s). Identify proposed changes:
21 proposed water sources along the tote road. See Section 3 of the amendment application (Knight Piésold, 2021). Locations shown on Figure 3.1.
Does the proposed amendment change the quality of the water source and/or its available capacity?
☐ Yes X No
No changes to the quality or available capacity of any water sources will occur.
Does the proposed amendment change the overall quantity of water to be used?
X Yes
Provide the overall estimated quantity to be used. Identify proposed changes: See Section 3 of the amendment application (Knight Piésold, 2021).
Does the proposed amendment change the quantity of water to be used from each source?
X Yes
Provide the estimated quantity(s) of water to be used from each source. Identify proposed changes. : Additional water required from previously approved sources:
See Section 3 of the amendment application (Knight Piésold, 2021).
Does the proposed amendment change the quantity of water to be used for each purpose?
X Yes
Provide the estimated quantities to be used for each purpose (camp, drilling, etc.). Identify proposed changes
Increased dust suppression efforts along the Tote Road and the railway construction right-of-way will require additional water. See Section 3 of the amendment application (Knight Piésold, 2021) for estimated quantities.
Does the proposed amendment change the method(s) of extraction?
Describe the method(s) of extraction. Identify proposed changes. :
Does the proposed amendment change the quantity(s) of water returned to source(s)?
☐ Yes X No
Estimated quantity(s) of water returned to source(s). Identify proposed changes. : m³/day
Does the proposed amendment change the quality(s) of water returned to source(s)?
☐ Yes X No
Describe the quality(s) of water(s) returned to source(s). Identify any changes. :

14.	WASTE			
Check the appropriate box(s) to indicate the types of waste(s) approved in the existing licence.				
	X Sewage X Solid Waste X Hazardous X Bulky Items/Scrap Metal Animal Waste Other (describe):	X Waste oil X Greywater X Sludges X Contaminated soil and/or water		
Does	the proposed amendment change the typ	pe(s) of waste(s) to be generated or deposited?		
		☐ Yes X No		
		posed change(s) to the type(s) of waste(s) to be generated or continued generation and/or disposal of waste(s).		
	☐ Sewage ☐ Solid Waste ☐ Hazardous ☐ Bulky Items/Scrap Metal ☐ Animal Waste ☐ Other (describe):	☐ Waste oil ☐ Greywater ☐ Sludges ☐ Contaminated soil and/or water		
15.	QUANTITY AND QUALITY OF WASTI	E INVOLVED		
Does	the proposed amendment change the qu	uantity(s) of the types of wastes involved?		
		X Yes No		
Does the proposed amendment change the composition(s) of the types of wastes involved?				
		☐ Yes X No		
Does	the proposed amendment change the m	ethod(s) of treatment for the types of waste involved?		
		☐ Yes X No		
Does	the proposed amendment change the m	ethod(s) of disposal for the types of waste involved?		
		☐ Yes X No		
If Yes	to any of the above, describe the propos	ed changes:		
will res		ease. Construction activities, and increased trafficking of ore nd bulky scrap material. However, management and		
	ach type of waste indicated in Block 14, d d of treatment and method of disposal.	escribe its composition, quantity in cubic meters/day,		
The re	evised quantities of waste are provided be	elow.		

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Sewage	Sewage Waste	676.5 m ³ /day	Treated in Sewage Treatment Plant	Discharge at current effluent discharge point
Solid Waste	Large bulk items, plastic. non- combustible non-hazardous waste	41.1 m³/day	Landfill	Landfill
Solid Waste	Combustible Waste, food, rags	6.2 m ³ /day	Incineration	Incineration
Hazardous Waste	Paint, aerosol cans, oils, grease	2.1 m³/day	Storage in lined facility	Shipped off Site and disposed at licenced facility

				licenced facility		
16. OTHER AUTI	HORIZATIONS					
Does the proposed amendment change the need for other authorizations in addition to the sub-surface and surface land use authorizations provided in Block 6?						
		X Yes				
	additional authorization continue to be require		orizations are no long	er required, and		
For each provide the	following:					
Authorization:l	OL Commercial Lease	- will need to be amer	nded for the Phase 2 F	Proposal		
Administering Agend	y: _Qikiqtani Inuit Asso	ociation				
Project Activity: <u>Co</u>	onstruction of the North	n Railway; possibly oth	ner changes within Co	mmercial Lease		
) of issuance: <u>2021</u>	Date of expi	ry: <u>TBD</u>			
17. PREDICTED MEASURES	ENVIRONMENTAL IM	IPACTS OF UNDERT	AKING AND PROPO	SED MITIGATION		
Does the proposed a mitigation measures?	mendment change the	predicted environmen	ital impacts of the und	ertaking or the		
miligation measures:	•	☐ Yes X No				
Describe direct, indire	ect, and cumulative im	pacts related to water	and waste. Identify a	ny changes.		
See FEIS Addendum	n for the Phase 2 Propo	osal.				

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS
Was compensation paid and/or an agreement(s) for compensation been entered into with any existing or other users of water during consideration of the existing licence?
X Yes No
Baffinland has a Water Compensation Agreement in place with the Qikiqtani Inuit Association.
If Yes, provide the names, addresses and the nature of water use by those persons or properties.
Does the proposed amendment adversely affect any known persons or property including those that hold licences for water use in precedence to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature?
☐ Yes X No
If Yes, provide the names, addresses and the nature of water use of those persons or properties.
Advise the Board if compensation has been paid and/or an agreement(s) for compensation has been reached with any existing or other water users with respect to the proposed amendment.
Baffinland has a Water Compensation Agreement in place with the Qikiqtani Inuit Association.
19. INUIT WATER RIGHTS Was compensation paid/ or an agreement(s) for compensation been entered into with any Designated Inuit Organization (DIO) during consideration of the existing licence?
X Yes □ No
If Yes, which DIO(s): Qikiqtani Inuit Association (QIA)
Does the proposed amendment substantially affect the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL)?
☐ Yes X No
If Yes, advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more DIO(s) with respect to the proposed amendment.
20. CONSULTATION - Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.
Summary of public consultation presented in the FEIS Addendum for the Phase 2 Proposal.
21. SECURITY INFORMATION
Does the proposed amendment change the financial security assessment?
X Yes No

Does the proposed amendment change the estimate of the total financial security for final reclamation?
X Yes
Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken. Identify any changes in the financial security assessment resulting from the proposed amendment.
An updated reclamation security estimate is provided with the draft Interim Closure and Reclamation Plan (BAF-PH1-830-P16-0012, Revision 6).
Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the <i>Mine Site Reclamation Policy for Nunavut</i> , Indian and Northern Affairs Canada, 2002.
22. FINANCIAL INFORMATION
Is the statement of financial security the same as that considered in the existing water licence?
X Yes No
Provide an updated statement of financial security.
If the applicant is a business entity, please answer the questions below:
Is the list of the officers of the company the same as those considered in the existing water licence?
☐ Yes X No
Provide a list of the officers of the company. See Attachment 6.2
Is the Certificate of Incorporation or evidence of registration of the company name the same?
X Yes No
Attach a copy of the Certificate of Incorporation or evidence of registration of the company name. See Attachment 6.1
23. STUDIES UNDERTAKEN TO DATE
List and attach updated studies, reports, research etc.
See FEIS Addendum for the Phase 2 Proposal, and supplemental information in main report with attachments (Knight Piésold, 2021).
Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report. See Attachment 5.1 of Knight Piésold (2021).
If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach

24.	PROPOSED TIME SCHEDULE	
When	are proposed amendments scheduled to be undertaken:	
	the proposed amendment change the time schedule considered in the existing opment?	licence for any phase of
	☐ Yes X No	
	te the start and completion dates for each applicable phase of development (core, and post closure). Identify proposed changes.	enstruction, operation,
	Construction	
	Proposed Start Date: 01/2022 Proposed Completion Date:	
	(month/year) Operation	(month/year)
	Proposed Start Date: <u>Currently operating</u> Proposed Completion Date:	12/2038
	(month/year)	(month/year)
	Closure	40/0044
	Proposed Start Date: 01/2039 Proposed Completion Date: (month/year)	<u>12/2041</u>
	Post - Closure	(monthly year)
	Proposed Start Date:01/2042 Proposed Completion Date:	
	(month/year)	(month/year)
For ea	ch applicable phase of development indicate which season(s) activities occur.	
	Construction	
	☐ Winter ☐ Spring ☐ Summer ☐ Fall X All season	
	Operation ☐ Winter ☐ Spring ☐ Summer ☐ Fall X All season	
	Closure ☐ Winter ☐ Spring ☐ Summer ☐ Fall X All season	
	Post - Closure ☐ Winter ☐ Spring X Summer ☐ Fall ☐ All season	
25.	PROPOSED TERM OF LICENCE	
On wl	hat date does the existing licence expire? June 10, 2025	
Is the	Licensee applying for a combined renewal and amendment of the existing licer	nce?
	X Yes ☐ No	
If Yes	s, indicate the proposed term of the renewal (maximum of 25 years):10 years	<u>rs</u>
Regu	ested date of renewal issuance: July 2022 Requested Expiry D	ate: June 2032
1-**	ested date of renewal issuance: <u>July 2022</u> Requested Expiry D (month/year)	(month/year)
	quested date of renewal issuance must be <u>at least</u> three (3) months from the date of and <u>at least</u> one (1) year from the date of application for a type A water licence, to allo	

licence and <u>at least</u> one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: <u>Processing Water Licence Applications</u> for more information)*

26.	ANNUAL REPORTING	3					
Will the	proposed amendment	change the conten	nt of annual reports or the annual report template?				
			☐ Yes X No				
If Yes, preport.	provide details regardin	g the content of an	nnual reports and a proposed outline or template of the annual				
27.	CHECKLIST						
The foll	owing must be included	with the application	on for Amendment for the water licensing process to begin.				
	Completed Application for Water Licence Amendment form. Attachment 2						
	X Yes	□No	If no, date expected				
	Information addressing Supplement Information Guideline (SIG), where applicable (see Block 11) Attachment 3						
	X Yes	□No	If no, date expected				
	Compliance Assessment / Status Report (see Block 23). Attachment 5						
	X Yes	□No	If no, date expected				
	Indication of Renewal Requirement (see Block 26) see Block 26						
	X Yes	□No	If no, date expected				
	English Summary of Amendment Application. Attachment 1						
	X Yes	□No	If no, date expected				
	Inuktitut and/or Inuinnaqtun Summary of Amendment Application. Attachment 1						
	X Yes	□No	If no, date expected				
	Application fee of \$30.00 CDN (Payee Receiver General for Canada). Submitted with 2018 version of application						
	X Yes	□No	If no, date expected				
	Water Use Fee Deposit of \$30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence. Submitted with 2018 version of application						
	X Yes	☐ No	If no, date expected				

28.	SIGNATURE			
	Lou Kamermans	Senior Director, Sustainable Development	M	Sept 7, 2021
	Name (Print)	Title (Print)	Signature	Date

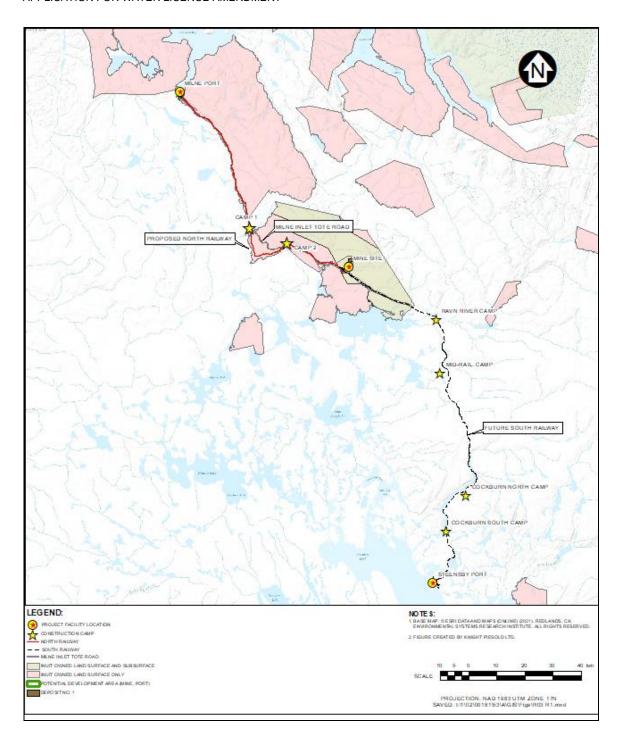


Figure 1 – Location of Project Activities