

Eqe Bay Exploration Program Type 'B' Water Licence Application

Attachment 2
Water Licence Application Form



General Water Licence Application (Application for a new Water Licence)

Document Date: April 2013

Application Submission Date:

12/07/2018 Month/Day/Year

P.O. BOX 119 GJOA HAVEN, NUNAVUT XOB 1J0

Tel: (867)360-6338 Fax: (867)360-6369 NUNAVUT IMALIRIYIN KATIMAYIT NUNAVUT WATER BOARD OFFICE DES EAUX DU NUNAVUT

DOCUMENT MANAGEMENT

Original Document Date: April 2010

DOCUMENT AMENDMENTS

	Description	Date
(1)	Updated for public distribution as separate document from NWB Guide 4	June 2010
(2)	Updated NWB logos and reformatted table to allow rows to break across page	May 2011
(3)	Update NWB logo	April 2013
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		



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GENERAL WATER LICENCE APPLICATION (APPLICATION FOR NEW WATER LICENCE)

LICENCE NO:

(for NWB use only)

1. APPLICANT (PROPOSED LICENSEE)
CONTACT INFORMATION (name, address)

Thomas (Tom) Iannelli Head of Exploration Baffinland Iron Mines Corporation #300 – 2275 Upper Middle Road E. Oakville, ON L6H 0C3

Phone: (416) 364-8820, ext. 5024

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e-mail: thomas.iannelli@baffinland.com

2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different

from Block 1 (name, address)

Richard Cook Knight Piésold Ltd. 1650 Main Street West North Bay, ON P1B 8G5

Phone: <u>(705) 476-2165</u> Fax: <u>(705) 474-8095</u>

e-mail: rcook@knightpiesold.com

Attach authorization letter: see Cover Letter

3. NAME OF PROJECT (including the name of the project location)

Eqe Bay Exploration Program (Eqe Bay, Nunavut)

4. LOCATION OF UNDERTAKING

Project Extents

NW Lat: 69°38'32.31"N Long: 77°13'45.39"W
NE Lat: 70°08'43.27"N Long: 75°42'15.92"W
SE Lat: 69°58'14.53"N Long: 75°13'47.09"W
SW Lat: 69°28'18.31"N Long: 76°45'11.40"W

Camp Location(s)

Latitude: (Lat: 69°37'48.95"N) Longitude: (76°39'47.38"W)

5.	MAP - Attach a topographical map, indicating the main components of the undertaking.									
See Fig	gures 1, 2 and 3 (attached). Figure 3 is at a scale of 1:50,000.									
NTS M	lap Sheet No.: 37C/9 Map Name: Eqe Bay Map Scale: 1:50,000									
6.	NATURE OF INTEREST IN THE LAND - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).									
	Sub-surface									
	■ Mineral Lease from Nunavut Tunngavik Incorporated (NTI) Date (expected date) of issuance: May 1, 2008 Date of expiry: May 1, 2028									
	Mineral Lease from Indian and Northern Affairs Canada (INAC) Date (expected date) of issuance: Date of expiry:									
	Surface									
	Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC) Date (expected date) of issuance: Date of expiry:									
	Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA) Date (expected date) of issuance: Date of expiry:									
	☐ IOL Authorization from Kivalliq Inuit Association (KivIA) Date (expected date) of issuance: Date of expiry:									
	■ IOL Authorization from Qikiqtani Inuit Association (QIA) Date (expected date) of issuance: _March 31, 2019 Date of expiry: _TBD									
	Commissioner's Land Use Authorization Date (expected date) of issuance: Date of expiry:									
	Other:									
Name										
	of entity(s) holding authorizations:									
7.	NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION									
	Indicate the land use planning area in which the project is located.									
	North Baffin ☐ Keewatin South Baffin ☐ Sanikiluaq Akunniq ☐ West Kitikmeot									
	Is a land use plan conformity determination required?									
	☐ Yes ■ No									
	If Yes, indicate date issued and attach copy									

	If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.						
	NPC letter dated April 17, 2018 (NPC File No. 148801); Refer to Attachment 3.						
8.	NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION Is an Article 12 Part 4 screening determination required?						
	Yes	■ Yes □ No					
	NIRB Letter dated August	t 17, 2018 (File No. 18E	N026); Refer to Attachment 3.				
9.	DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project propos						
See Project Proposal provided in Attachment 7. Note: The Project Proposal was developed in April 2018 for the NPC and NIRB review. Eqe Bay Exploration Program has progressed through the permitting and approvals programial baffinland has had to adjust the schedule for establishing the exploration camp and initiate the drilling program. Where the Project Proposal and this application differ on schedule, application should be used.							
10.	OPTIONS – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project. Baffinland started surface mineral exploration at Eqe Bay in 2013, operating from the Mary River Project and/or a small camp at Steensby Port. Further exploration cannot advance logistically or cost-effectively without establishing an exploration camp at the Eqe Bay location.						
11.	CLASSIFICATION OF PI undertaking by checking of		G - Indicate the primary classification of es.				
	☐ Industrial ■ Mining and Milling (inc ☐ Conservation ☐ Municipal (includes ca ☐ Power	ludes exploration/drilling	☐ Agricultural /exploration camps) ☐ Recreational ☐ Miscellaneous (describe below):				
	See Schedule II of Northwest Territories Waters Regulations for Description of Undertakings. Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application. Hydrostatic Testing						

	☐ Municipal☐ General Water Works☐ Power								
12.	WATER USE - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.								
	 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: 								
13.	QUANTITY AND QUALITY OF WATER INVOLVED - For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.								
	Name of water source(s) (show location(s) on map): An unnamed lake referred to as Lake EB-1 will provide water to the camp, and an unnamed lake referred to as Lake EB-2 will provide water for drilling. Other miscellaneous ponds will be used for drilling water. Locations are shown on Figure 3.								
	Describe the quality of the water source(s) and the available capacity: Water quality of the water sources are unknown, but they are expected to be potable and suitable for drilling. The winter water withdrawal from Lake EB-1 will result in a drawdown of approximately 1 mm over an 8-month period of ice cover. The winter water withdrawal from Lake EB-2 will result in a drawdown of approximately 2.5 mm over an 8-month period of ice cover. The winter water withdrawals represent 0.1% and 2.1% of the annual recharge in Lakes EB-1 and EB-2, respectively, based upon lake catchment sizes and mean annual unit runoffs from 7 hydrometric stations associated with the Mary River Project.								
	Provide the overall estimated quantity of water to be used: m³/day								
	Provide the estimated quantity(s) of water to be used from each source: Lake EB-1 (Camp Water Supply) = 29 m³/day or 10,585 m³/year Lake EB-2 (Drilling Water Supply) = 270 m³/day, or 98,550 m³/year								
	Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.) Camp Water Supply = 29 m³/day or 10,585 m³/year Drilling Water Supply = 270 m³/day, or 98,550 m³/year								
	Describe the method of extraction(s): Temporary intakes equipped with fish screens.								
	Estimated quantity(s) of water returned to source(s) 0 m³/day.								
	Describe the quality of water(s) returned to source(s): Not applicable.								
14.	WASTE – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.								
	■ Sewage ■ Waste oil ■ Solid Waste ■ Greywater ■ Hazardous ■ Sludges								

Bulky Items/Scrap Metal	Contaminated soil and/or water
☐ Animal Waste	
Other (describe):	
_ , , ,	

15. QUANTITY AND QUALITY OF WASTE INVOLVED – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Type of Composition Waste		Quantity Generated	Treatment Method	Disposal Method	
Sewage	Camp sewage including greywater	20 to 30 m ³ /day	Sewage Treatment Facility	Treated Effluent Discharge	
Solid Waste	Food waste, packaging	2 kg / person / day (200 kg / day)	Incineration of combustible non-		
Hazardous	Waste oil, waste antifreeze, oily rags	2,000 L / year	Backhaul to southern disposal or recycling facility		
Bulky Items/ Scrap Metal	Scrap metal (old drill rods, etc.)	Included in solid waste quantity estimate.	Backhaul to southern disposal or recycling facility Storage in lined facility; backhaul to southern disposal facility		
Waste Oil	-	2,000 L / year			
Greywater	-	Included in sewage quantity estimate.	Sewage treatment fa excavated sump.	acility or	

16. OTHER AUTHORIZATIONS – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following:

Authorization:	Letter of	Advice for	Culvert	Installations	and Barge	e Ramp	
, .aa	_0	, (0,1,00,10)	0011010	motananono	aria barge	o i tairip	

Administering Agency: Fisheries and Oceans Canada

Project Activity: <u>Culvert installations along proposed access road/trail between camp and exploration</u> area; barge ramp in Ege Bay.

Date (expected date) of issuance: March 31, 2019 Date of expiry: TBD______

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES - Describe direct, indirect, and cumulative impacts related to water and waste.

- Air quality the exploration activities will generate emissions locally that will have limited environmental impact.
- Noise drilling, helicopters and airplanes will generate noise that has the potential to impact wildlife. There is a walrus haul-out on an Imiliq Island, approximately 15 km from the exploration area. Air traffic will avoid this area and will be mindful of the possible presence of other walrus haul-outs as well as caribou in the area. Minimum flight altitudes specified in land use leases/permits will be adhered to. An access trail will eventually be constructed between the camp and exploration area to minimize helicopter use.
- Surface water Water will be withdrawn from two lakes in the area. Winter withdrawals will comply

- with DFO's 2010 Winter Water Withdrawal Guidelines. Intakes will be equipped with fish screens.

 Fisheries Culverts will be installed in two small streams. Baffinland will seek direction from DFO including complying with the best practices outlined in a Letter of Advice (LOA).
- Soils, Permafrost and Landforms Ground disturbances will be minimized. Quarries may be exploited to construct an access trail and an airstrip.
- Vegetation and wildlife Baffinland will follow the wildlife and caribou protection measures outlined in exploration program's Environmental Protection Plan. This includes reducing activity of caribou move into the area.
- Cultural Heritage A qualified archaeologist conducted archaeological surveys in the summer of 2018. Archaeological sites identified will be avoided, protected or mitigated, using a methodology consistent with the Mary River Project's Cultural Heritage Protection Plan.
- Land Use The exploration program area is not currently a high use area, based on the Mary River Inuit Knowledge Study and discussions with the Hamlet Councils and Hunter and Trapper Organizations in Igloolik and Hall Beach. The area was historically used by Inuit.

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent 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.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

No persons or properties are expected to be adversely affected by the proposed undertaking. To Baffinland's knowledge, there are no other water licence or land use holders active in the area.

19. INUIT WATER RIGHTS

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and 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 Designated Inuit Organization (DIO).

The Eqe Bay Exploration Program is not expected to substantially affect the quality, quantity or flow of waters through IOL. This aspect will be discussed and agreed upon with the Qikiqtani Inuit Association during the Land Use Lease III application process.

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.

Consultation meetings on the Ege Bay Exploration Program included:

- April 5, 2018 meeting with the Hamlet of Hall Beach Mayor and Council, along with representatives from the Hall Beach Hunters and Trappers Organization (HTO)
- April 6, 2018 meeting with the Municipality of Igloolik Mayor and Council, along with representatives from the Igloolik HTO
- April 12, 2018 meeting with the Qikiqtani Inuit Association
- November 27, 2018 meeting with Hamlet of Igloolik Mayor and Council, along with representatives from the Igloolik HTO.

Community representatives did not express any significant concerns but did indicate that this is a

traditional area containing archaeological sites. The communities requested ongoing updates as well as to be involved in employment and other opportunities associated with Eqe Bay. The QIA staff discussed permitting aspects but did not express concerns. Details on consultation is provided in Attachment 4.

21. SECURITY INFORMATION

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.

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 *Mine Site Reclamation Policy for Nunavut*, Indian and Northern Affairs Canada, 2002.

A reclamation cost estimate is presented in the Closure and Reclamation Plan, presented in Attachment 11.

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility. If the applicant is a business entity, provide a list of the officers of the company. If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

Provided in Attachment 5.

23. STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.

No studies have been undertaken in support of the Eqe Bay Exploration Program. A number of relevant studies conducted for the Mary River Project describe Inuit land use and ecological resources:

- Knight Piésold Ltd., 2010. Baffinland Iron Mines Corporation Mary River Project Land Use in the Vicinity of the Mary River Project. Ref. No. NB102-181/2, Rev. 0, December 16.
- Baffinland Iron Mines Corporation, 2014. *Mary River Inuit Knowledge Study*. Compiled by Knight Piésold Ltd.

The Eqe Bay Exploration Program Project Proposal (Attachment 7) describes site conditions including catchment areas feeding the water source lakes.

24. PROPOSED TIME SCHEDULE – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction Proposed Start Date: August 2019 Proposed Completion Date: December 2019 (month/year) (month/year) Operation Proposed Start Date: <u>December 2019</u> Proposed Completion Date: December 2024 (month/year) (month/year) Closure Proposed Start Date: December 2024 Proposed Completion Date: October 2025 (month/year) (month/year) Post-Closure

	Proposed Start Date:N/A Proposed Completion Date:				N/A			
	(month/year)				(month/year)			
	For each applicable phase of development indicate which season(s) activities occur.							
	Construction							
	Winter	Spring	Summer	Fall	All season			
	Operation Winter	Spring	Summer	Fall	All season			
	Closure Winter	Spring	Summer	Fall	All season			
	Post - Closu Winter	<u>ure</u> ☐ Spring	Summer	∏Fall	All season			
25.	PROPOSEI	D TERM OF	LICENCE					
	Number of	years (maxim	ium of 25 year	s):	approx. 7	years		
	Requested	Date of Issua	ance: March 2 (month/y		equested Expiry		n <u>ber 2025</u> nth/year)	
water licensing license a respond	and <u>at least</u> on the cence applicated application in a central application and a central application and a central application and a central application and a central application application and a central application	one (1) year from tion. These ti nning or deve accordance wi	om the date of a meframes are a lopment impact th any project sp	application approximate requirement pecific guid	for a type A water e and do not acco nts, time for the a elines issued by the	r licence, to allount for the tire pplicant to present NWB, or the	ation for a type B water low for processing of the me to complete any prepare and submit a water e time for the applicant to Licence Applications for	
26.	ANNUAL REPORTING – If not using the NWB's <u>Standardized Form for Annual Reporting</u> , provide details regarding the content of annual reports and a proposed outline or template of the annual report.							
	Annual reporting will follow the reporting requirements of the water licence. Baffinland's annual reports prepared for Type 'B' Water Licence 2BE-MRY1421 (Mary River Project) can also be used as a guide.							
27.	CHECKLIS begin.	T – The follo	wing must be i	ncluded w	ith the application	on for the wat	er licensing process to	
	Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.							
	Yes		□No	If no,	date expected _			
			n the NIRB core been address		at NIRB's requir	ements rega	rding development	
	Yes		□No	If no,	date expected _		<u>-</u>	
	Completed General Water Licence Application form.							

Name (Print)		Title (Prin	nt)	Signature		Date	
Т	homas lannelii	Head of Explo	oration	Thoma	s lannelli	Dec. 7, 2018	
28.	SIGNATURE						
	☐ Yes	■ No	If no, date e	expected	Dec. 14, 2018		
	Application Fee of \$30.00 CDN (Payee Re ☐ Yes ☐ No Water Use Fee Deposit of \$30.00 CDN (use fee will be calculated by the NWB laccordance with the Regulations at the times.)		B based upon	the amour	it of water author		
			If no, date				
			Receiver Gene	eceiver General for Canada).			
	■ Yes □ No		If no, date expected				
	Inuktitut and/or Inuinn	aqtun Summary o	f Application.				
	Yes	□No	If no, date	expected _			
	English Summary of A	Application.					
	Yes	□No	If no, date	expected _			
	Information addressin	formation Guid	leline (SIG)	, where applicabl	e (see Block 11)		
	Yes	□No	If no, date	expected _			