

Appendix 1

Type "B" Water Licence Renewal and Amendment Application



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

Document Date: May 2011

Application Submission Date: **04/24/2014**
Month/Day/Year

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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)		
(4)		
(5)		
(6)		
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GENERAL WATER LICENCE APPLICATION (APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: *Guide to Completing and Submitting a Water Licence Application for a New Licence* for more information about this application form.

LICENCE NO: (for NWB use only)	
1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address) Name: Erik Madsen, Vice President, Sustainable Development, Health, Safety and Environment Baffinland Iron Mines Corporation Suite 300, 2275 Upper Middle Rd East Oakville, ON L6H 0C3 Phone 416.364.8820 (Main) 416.814.3980 (Direct) Fax: 416-364-0193 e-mail: erik.madsen@baffinland.com (cc jim.millard@baffinland.com)	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address) n/a
3. NAME OF PROJECT (including the name of the project location) Mary River Site Preparation, Milne Port, Baffin Island	
4. LOCATION OF UNDERTAKING Project Extents NW: Latitude: (72 °05 '00 " N) Longitude: (77 °45'00 " W) NE: Latitude: (72 °05 '00 " N) Longitude: (81 °00'00 " W) SE: Latitude: (69 °49'00 " N) Longitude: (81 °00'00 " W) SW: Latitude: (69 °49 ' 00" N) Longitude: (77 °45 ' 00" W) Camp Location(s) Mary River Mine Site Camp Latitude: (71 °19 '30 " N) Longitude: (79 ° 22 ' 40" W) Milne Port Camp Latitude: (71 °53 '00 " N) Longitude: (80 ° 54 ' 15" W)	
5. MAP - Please see the site layout presented in Appendix 5.	

- 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: _____ Date of expiry: _____

☒ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ 1992 _____ Date of expiry: _____ 2036 _____

Surface

☒ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)

Land Use Permit N2007F0004 expiry: July 4, 2014

Quarry Permit 2012QP0065 expiry: July 4, 2014

Quarry Permit 2013QP0086 expiry: July 4, 2014

Water Licence – Type B – 2BE-MRY1421 expiry: April 16, 2021

Water Licence – Type B – 8BC-MRY1314, (subject of this renewal application)

Water Licence – Type A – 2AM-MRY1325 expiry: June 10, 2025

☐ 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)
Inuit Land Use Lease and Quarry Concession (Commercial Lease Q13C301) – September 6, 2013 no expiry

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☒ Other: **Exploration agreement with NTI for a land package surrounding Mining Leases 2483, 2484 and 2485**
Date (expected date) of issuance: 1992 Date of expiry: 2034

Name of entity(s) holding authorizations: Baffinland Iron Mines Corporation

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the project is located.

<input checked="" type="checkbox"/> North Baffin	<input type="checkbox"/> Keewatin
<input type="checkbox"/> South Baffin	<input type="checkbox"/> Sanikiluaq
<input type="checkbox"/> Akunnig	<input type="checkbox"/> West Kitikmeot

Is a land use plan conformity determination required?

☒ Yes ☐ No

If Yes, indicate date issued and attach copy: NPC decision issued in April 2014, see attached –

If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

Is an Article 12 Part 4 screening determination required?

No

Positive recommendation to amend Mary River Project Certificate No. 005 for activities applied for under the Early Revenue Phase was received on March 18, 2014. The document can be viewed on NIRB's public website, document titled: Nunavut Impact Review Board, Public Hearing Report, Mary River Project: Early Revenue Phase Proposal, Baffinland Iron Mines Corporation, NIRB File No. 08MN053, March 2014.

Baffinland Iron Mines Corporation is applying for the renewal and amendment of Type B Water Licence 8BC-MRY1314 to include water use of up to 299 m³/day from two water sources already approved under Baffinland's Type "A" Licence. The additional water use is a temporary requirement whilst infrastructure of the ERP is constructed. The average camp occupancy and water use predicted on an annual basis by Baffinland and assessed by the Nunavut Impact Review Board remains unchanged. However, climatic conditions necessitate a compressed construction schedule during the summer months where daily water take may exceed water allowance under Baffinland's Type "A" Licence. The amendment to this Licence would enable Baffinland to draw up to 299 m³/day of water from Philips Creek or km 32 Lake along the Tote Road. The hydrology assessment provided in Appendix 4 indicates that this additional water use is negligible given water flows and that both water sources will not be negatively impacted as a result of the proposed additional water use.

This amendment would also enable Baffinland to install and operate, if required for contingency, an additional polishing waste stabilization pond (PWSP) at Milne Port for handling effluent generated during peak capacity at the construction camp.

For a more detailed description of the undertaking, please refer to Appendix 3 and drawings in Appendix 5 of the application.

The alternative consists of housing the construction crews at the Mary River camp (100 km from Milne Port) with daily transportation of construction workers to and from Milne Port along the Milne Inlet Tote Road. This alternative would result in a longer construction period, more cost and increased health and safety risk to workers being transported along the Tote Road. Further, this option would not reduce the overall required water use in the region or enable Baffinland to utilize the more localized water source at Phillips Creek or km 32 Lake.

☐ Recreational

<input type="checkbox"/> Power	<input type="checkbox"/> Miscellaneous (describe below): <hr/>
<p>See Schedule II of <i>Northwest Territories Waters Regulations</i> for Description of Undertakings.</p> <p>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.</p> <p> <input type="checkbox"/> Hydrostatic Testing <input type="checkbox"/> Tannery <input type="checkbox"/> Tourist / Remote Camp <input type="checkbox"/> Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil <input type="checkbox"/> Onshore Oil and Gas Exploration Drilling <input type="checkbox"/> Mineral Exploration / Remote Camp <input type="checkbox"/> Advanced Exploration <input checked="" type="checkbox"/> Mine Development <input type="checkbox"/> Municipal <input type="checkbox"/> General Water Works <input type="checkbox"/> Power </p>	
<p>12. WATER USE - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.</p> <p> <input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes <input checked="" type="checkbox"/> To obtain water for industrial purposes <input type="checkbox"/> To cross a watercourse <input type="checkbox"/> To alter the flow of, or store water <input type="checkbox"/> Other: _____ </p> <p style="margin-left: 400px;"> <input type="checkbox"/> To divert a watercourse <input type="checkbox"/> To modify the bed or bank of a watercourse <input type="checkbox"/> Flood control </p>	
<p>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.</p> <p>Up to 299 m³/day of freshwater drawn from Phillips Creek (summer only) and km 32 Lake (winter and summer) along the Tote Road to satisfy the requirements for construction of the Early Revenue Phase facilities and additional domestic consumption due to increased workforce during the construction period. Under this Type B Licence Amendment Baffinland is requesting the flexibility to use up to a combined total of 299 m³/day from Phillips Creek and or km 32 Lake during summer months. The hydrological assessment contained in Appendix 4 supports this request from a hydrological and environmental standpoint.</p> <p>Describe the quality of water(s) returned to source(s):</p> <p>Water used in the camp will be pumped to a sewage treatment plant. The discharge of treated sewage will meet or exceed Type A Water Licence 2AM-MRY1325 Water Licence effluent quality criteria.</p>	
<p>14. WASTE – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.</p>	

<p> <input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous <input type="checkbox"/> Bulky Items/Scrap Metal <input type="checkbox"/> Animal Waste Other (describe): All waste water and wastes generated during the construction of the ERP facilities will be handled in accordance to the terms and conditions of the Type A Water Licence 2AM-MRY1325 </p>	<p> <input type="checkbox"/> Waste oil <input checked="" type="checkbox"/> Greywater <input checked="" type="checkbox"/> Sludges </p>
<p>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.</p> <p>Quantity of grey water/sewage to be treated: 50 m³/day Quantities of sludge produced: 750 L/day (Incinerated and ash tested, if harmless disposed at Mary River landfill site).</p>	
<p>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.</p> <p>No other authorizations required.</p>	
<p>17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES - Describe direct, indirect, and cumulative impacts related to water and waste.</p> <p>No significant effects on water quantity or water quality. Refer to Appendix 4 for Hydrological Study for Philips Creek and 32 KM Lake. Treated sewage effluent will meet Type A Water Licence 2AM-MRY1325 effluent discharge criteria and will be discharged to the marine environment. No significant effects predicted.</p> <p>The water intake and discharge of treated effluent will be monitored as part of the Type A Licence 2AM-MRY1325 Aquatic Effects Monitoring Plan.</p>	
<p>18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER</p> <p>Water compensation agreement with QIA as part of Commercial lease Q13C301 (Section 4.3)</p>	
<p>19. INUIT WATER RIGHTS</p> <p>Baffinland does not anticipate the planned activities under application will have any impact on Inuit water rights. Baffinland has a Water Compensation Agreement in place with the QIA as part of our Commercial Production Lease.</p>	
<p>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.</p> <p>Activities, infrastructure and potential environmental effects were considered during the NIRB technical review process and hearings, culminating in the issuance of the NIRB Project Certificate in</p>	

	December 2012, as well as the NPC and NIRB review process for the amendment process for activities and infrastructure related to the Early Revenue Phase.
21.	<p>SECURITY INFORMATION</p> <p>A total Security amount, under the Type A Licence is posted in respect of the Mary River facilities. Currently \$122,000 is posted under Type B Water Licence 8BC-MRY1314. The \$122,000 accounts for the 2014 Work Plan which includes the construction camp and its associated sewage treatment facility. Refer to Submission to NWB of 2014 Work Plan and Security Estimate on 31 October, 2013. Additional security for construction of facilities such as a Polishing Waste stabilization Pond proposed under this licence amendment (for contingency purposes) is described in Appendix 8. Baffinland suggests that the additional security of \$24,807 is held with the landowner, the QIA.</p>
22.	<p>FINANCIAL INFORMATION</p> <p>Provide a statement of financial responsibility.</p> <p>Baffinland Iron Mines Corporation (the "Company") is a corporation organized pursuant to the Business Corporations Act (Ontario) ("OBCA") with its registered office at 2275 Upper Middle Road East – Suite 300, Oakville, Ontario, L6H 0C3. The Company was formed following the amalgamation of 1843208 Ontario Inc. ("1843208") and Baffinland Iron Mines Corporation ("BIM"), a corporate predecessor of the Company. ArcelorMittal Mines Canada and Nunavut Iron Ore ("NIO") each hold 50% of the outstanding common shares of the Company.</p> <p>The Company is the sole general partner of Baffinland Iron Mines LP ("BIM LP"), a limited partnership formed under the Limited Partnerships Act (Ontario) pursuant to a declaration of limited partnership made on January 1, 2013 and a limited partnership agreement entered into on January 1, 2013 between 1843208, ArcelorMittal Mines Canada Holding LP (subsequently renamed Mary River Project Manitoba Holding LP – "Holding LP") and NIO in which the Company holds a 42.5% partnership interest. Holding LP and NIO each hold a 28.75% limited partnership interest in BIM LP. BIM LP is the current beneficial owner of advanced stage, direct shipping iron ore development prospects located on its Mary River Property on Baffin Island, Nunavut (the "Project").</p> <p>If the applicant is a business entity, provide a list of the officers of the company.</p> <p>Please refer to Appendix 7.</p> <p>If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.</p> <p>Please refer to Appendix 7.</p>
23.	<p>STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.</p> <p>See Mary River Final Environmental Impact Statement (FEIS), the Addendum to the FEIS and Baffinland Application for Type A Water Licence.</p>
24.	<p>PROPOSED TIME SCHEDULE – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).</p> <p><u>Construction</u> Proposed Start Date: <u>July 1, 2014</u> Proposed Completion Date: <u>September 31, 2017</u> (month/year) (month/year)</p>

For each applicable phase of development indicate which season(s) activities occur.

Construction

☐ Winter ☐ Spring ☐ Summer ☐ Fall x All season

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): 3 years (to be replaced by Type A Water Licence amendment once construction is completed)

Requested Date of Issuance: July/2014 Requested Expiry Date:

September/2017

(month/year)

(month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a Type B Water Licence and at least 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: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING – If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

Baffinland will use the standardized form.

27. CHECKLIST – The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

X Yes ☐ No If no, date expected _____

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

X Yes ☐ No If no, date expected _____

Completed General Water Licence Application form.

X Yes ☐ No If no, date expected _____

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

X Yes ☐ No If no, date expected _____

English Summary of Application.

☒ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

☒ Yes ☐ No If no, date expected: 2 May 2014

Application Fee of \$30.00 CDN (Payee Receiver General for Canada).

☒ Yes ☐ No If no, date expected: Application Fee will be sent by cheque with the hard copy of this application, expected 15 May 2014

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.

☒ Yes ☐ No If no, date expected: Water Use Fee Deposit will be sent by cheque with the hard copy of this application, expected 15 May 2014

28. SIGNATURE

<u>Erik Madsen</u>	<u>Sustainable Development</u> <u>Vice President</u>	<u></u>	<u>April 24, 2014</u>
Name (Print)	Title (Print)	Signature	Date