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

Document Date: May 2011

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DOCUMENT MANAGEMENT

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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)		
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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) Baffinland Iron Mines Corporation Suite 1016, 120 Adelaide Street West Toronto, Ontario M5H 1T1 Phone: 416-814-3980 Fax: 416-996-5523 e-mail:	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address) Erik Madsen Vice President Sustainable Development, Health, Safety & Environment Phone: 416-814-3980 Fax: 416-996-5523 e-mail: erik.madsen@baffinland.com (Attach authorization letter.)
3. NAME OF PROJECT (including the name of the project location) Mary River project, North Baffin Island Region, Nunavut	
4. LOCATION OF UNDERTAKING Project Extents (see attached map) 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) Milne Inlet Landfarm Location: (71° 52' 49" N) Longitude: (80° 53' 32" W) Mary River Fuel Tank Farm Location: (71° 18' 11" N) Longitude: (79° 15' 39" W) Steensby Camp: (70° 17' 41" N) Longitude: (78° 29' 21" W)	
5. MAP - Attach a topographical map, indicating the main components of the undertaking. NTS Map Sheet No.: 37F, 37G, 47H Map Name: _____ Map Scale: 1:250 000 Refer to Attachment 2	

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: _____

X Mineral Lease from Indian and Northern Affairs Canada (INAC)
Leases 2483, 2484 and 2485
Date (expected date) of issuance: 1992 Date of expiry: 2013

Surface

X Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Land Use Permit # 2006C0036 Date of expiry: July 4, 2012
Land Use Permit # N20070004 Date of expiry: April 3, 2012
Quarry Permit # N2011QP0079 Date of expiry: April 3, 2012
Application for Class A Land Use Permit at Steensby – pending NIRB decision on the 2012 Work Plan

☐ 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: _____

X IOL Authorization from Qikiqtani Inuit Association (QIA)
Commercial Lease #Q10C3001
Date (expected date) of issuance: _____ Date of expiry: December 31, 2012

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

X 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: 2013

Name of entity(s) holding authorizations: _____

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

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

X 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?

X Yes ☐ No

If Yes, indicate date issued and attach copy - *Letter from NPC dated February 8, 2008 (Attachment 3).*

	<p>If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.</p>		
8.	<p>NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION</p> <p>Is an Article 12 Part 4 screening determination required?</p> <p>X Yes <input type="checkbox"/> No</p> <p>If Yes, indicate date issued and attach copy – <i>Pending completion of joint NIRB-NWB review process for 2012 Work Plan</i></p> <p>If No, provide written confirmation from NIRB confirming that a screening determination is not required.</p>		
9.	<p>DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project proposal.</p> <p><i>Refer to Transmission letter preceding this application</i> <i>Maps and drawings are included in Attachment 2 of this Application</i></p>		
10.	<p>OPTIONS – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.</p> <p><i>An application for Review and Approval of Pre-Development Work for the Mary River Project was submitted on September 15th 2011. This application included an application for a new Type B water license for the proposed work. However, the scale of the proposed 2012 Work Plan was deemed to large by reviewers and stakeholders. As a result, Baffinland has scaled down the scope of the 2012 Work Plan. The current 2012 Work Plan is restricted to activities required for ongoing support of exploration and geotechnical investigations at Milne Inlet, the Mine Site and Steensby site. This Application for a new Type B water license covers the components of the 2012 Work Plan that are not already approved under Type B Water License 2BB-MRY-1114.</i></p>		
11.	<p>CLASSIFICATION OF PRIMARY UNDERTAKING - Indicate the primary classification of undertaking by checking one of the following boxes.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) <input type="checkbox"/> Conservation <input type="checkbox"/> Municipal (includes camps/lodges) <input type="checkbox"/> Power </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Agricultural <input type="checkbox"/> Recreational <input type="checkbox"/> Miscellaneous (describe below): </td> </tr> </table> <hr style="border: 0; border-top: 1px solid black; margin: 10px 0;"/> <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 checked="" type="checkbox"/> Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil <input type="checkbox"/> Onshore Oil and Gas Exploration Drilling <input checked="" type="checkbox"/> Mineral Exploration / Remote Camp <input checked="" type="checkbox"/> Advanced Exploration <input type="checkbox"/> Mine Development <input type="checkbox"/> Municipal </p>	<input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) <input type="checkbox"/> Conservation <input type="checkbox"/> Municipal (includes camps/lodges) <input type="checkbox"/> Power	<input type="checkbox"/> Agricultural <input type="checkbox"/> Recreational <input type="checkbox"/> Miscellaneous (describe below):
<input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Mining and Milling (includes exploration/drilling/exploration camps) <input type="checkbox"/> Conservation <input type="checkbox"/> Municipal (includes camps/lodges) <input type="checkbox"/> Power	<input type="checkbox"/> Agricultural <input type="checkbox"/> Recreational <input type="checkbox"/> Miscellaneous (describe below):		

	<input type="checkbox"/> General Water Works <input type="checkbox"/> Power	Supplementary information for the landfarm (Milne Inlet), the fuel tanks (Mary River) and the sewage treatment plant for the Steensby Camp are presented in Attachment 4.
12.	WATER USE - Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.	
	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input checked="" type="checkbox"/> To obtain water for camp/ municipal purposes <input 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: _____ </div> <div style="width: 50%;"> <input type="checkbox"/> To divert a watercourse <input type="checkbox"/> To modify the bed or bank of a watercourse <input type="checkbox"/> Flood control </div> </div>	
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>Name of water source(s) (show location(s) on map):</p> <p><i>Water supply for Steensby Camp will be provided from 3 km Lake at Steensby Inlet (refer to drawing H337696-4610-07-042-0003 in Attachment 5).</i></p> <p>Describe the quality of the water source(s) and the available capacity: <i>Good water quality.</i></p> <p>Provide the overall estimated quantity of water to be used: <i>80 m³/day</i></p> <p>Provide the estimated quantity(s) of water to be used from each source:</p> <p>Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)</p> <p><i>Domestic consumption 30 m³/day ; geotechnical and industrial use 50 m³/day</i></p> <p>Describe the method of extraction(s): water intake, pump house and pipeline for distribution</p> <p><i>Refer to conceptual water intake drawing presented in Attachment 5 (drawing #E337697-0000-07-042-0001)</i></p> <p>Estimated quantity(s) of water returned to source(s) : <i>None</i> <i>All water used is at the camp will be treated in a sewage treatment plant. The treated effluent will discharge to Steensby Inlet via an outfall. The quality of the treated effluent will meet discharge criteria established under license 2BB-MRY-1114 for discharge at Milne Inlet.</i></p> <p>Describe the quality of water(s) returned to source(s): <i>Sewage treatment discharge will comply with Type B water license MRY-1114 discharge criteria</i></p>	
14.	WASTE – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.	
	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input checked="" type="checkbox"/> Sewage <input checked="" type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous <input type="checkbox"/> Bulky Items/Scrap Metal </div> <div style="width: 50%;"> <input type="checkbox"/> Waste oil <input checked="" type="checkbox"/> Greywater <input checked="" type="checkbox"/> Sludges <input type="checkbox"/> Contaminated soil and/or water </div> </div>	

	<input type="checkbox"/> Animal Waste <input type="checkbox"/> Other (describe): _____
15.	<p>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><i>Domestic (solid) waste, sewage and grey water, and treatment plant sludge will be generated from the camp at Steensby Inlet.</i></p> <ul style="list-style-type: none"> • <i>Solid waste generated by the camp will be incinerated in the existing camp incinerator (permitted under license 2BB-MRY-1114);</i> • <i>Other bulky waste will be temporarily stored on site and transported to the Mary River landfill (permitted under license 2BB-MRY-1114);</i> • <i>Sewage and grey water will be treated in a new sewage treatment plant to be permitted under this application;</i> • <i>The sludge produced from the sewage treatment plant will be dewatered and incinerated in the existing camp incinerator (permitted under license 2BB-MRY-1114).</i>
16.	<p>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:</p> <p><i>Authorization: Class A Land Use Permit at Steensby</i> <i>Administering Agency: AANDC</i> <i>Project Activity: Construction and use of Steensby Camp and associated laydown areas</i> <i>Date (expected date) of issuance: 2012 Date of expiry: 2014</i></p>
17.	<p>PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES - Describe direct, indirect, and cumulative impacts related to water and waste.</p> <p><i>Refer to 2012 Work Plan in Attachment 1.</i></p>
18.	<p>WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER</p> <p>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.</p> <p>Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.</p> <p><i>A Commercial Lease Agreement with the QIA deals with Project water use on IOL. The Agreement allows for a maximum of 195,275 cubic meters per year. This agreement is currently being renegotiated in conjunction with the IIBA.</i> <i>There are no other users of water on Crown Land associated with the Project.</i></p>
19.	<p>INUIT WATER RIGHTS</p> <p>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</p>

<p>pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).</p> <p><i>A Commercial Lease Agreement with the QIA deals with Project water use on IOL. The Agreement allows for a maximum of 195,275 cubic meters per year. This agreement is currently being renegotiated in conjunction with the IIBA.</i></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><i>Consultation has taken place on 2012 Work Plan since June of 2011. A number of meetings were held with regulatory agencies throughout July, August and September 2011. Baffinland assisted QIA in community consultation regarding 2012 Work Plan in September. Feedback was obtained from QIA and review agencies at the DEIS Technical Meeting held in Iqaluit (October 18 to 20, 2011), and, from the communities of Pond Inlet (November 10) and Igloolik (November 8) during the DEIS Pre-Hearing Conference.</i></p>
<p>21. SECURITY INFORMATION</p> <p>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. <u>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.</u> The estimate must also include contingency factors appropriate to the particular work to be undertaken.</p> <p>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.</p> <p><i>Refer to the Closure Plan presented in Attachment 5.</i></p>
<p>22. FINANCIAL INFORMATION</p> <p>Provide a statement of financial responsibility.</p> <p>If the applicant is a business entity, provide a list of the officers of the company.</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><i>Baffinland corporate information is presented in Attachment 6:</i></p> <ul style="list-style-type: none"> - <i>Certificate of Incorporation</i> - <i>Officer's Register</i> - <i>Financial Statement for the year ended December 31, 2010 and 2009</i>
<p>23. STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.</p> <p>Extensive baseline studies have been undertaken for the Mary River Project. A summary of the conclusion of these studies was presented in the Application for Review and Approval of Pre-Development Work submitted to NIRB on September 15th, 2011, as well as the DEIS for the Mary River Project submitted in January 2011.</p>

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: May 2012 (month/year) Proposed Completion Date: October 2012 (month/year)

Operation & Care and Maintenance

Proposed Start Date: November 2012 (month/year) Proposed Completion Date: May 2013 (month/year)

Closure (should Mary River Project Certificate not be granted)

Proposed Start Date: May 2015 (month/year) Proposed Completion Date: October 2015 (month/year)

Post - Closure

Proposed Start Date: November 2015 (month/year) Proposed Completion Date: November 2020 (month/year)

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

Construction

☐ Winter ☐ Spring ☒ Summer ☐ Fall ☐ All season

Operation & Care and Maintenance

☐ Winter ☐ Spring ☐ Summer ☐ Fall ☒ All season

Closure

☐ Winter ☐ Spring ☒ Summer ☐ Fall ☐ All season

Post - Closure

☐ Winter ☐ Spring ☒ Summer ☐ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): 4 years

Requested Date of Issuance: April 2012 (month/year) Requested Expiry Date: April 2016 (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 NWB's *Standardized Form for Annual Reporting*

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 (*Attachment 1*) ☐ No If no, date expected _____

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

☐ Yes X No If no, date expected: *February 2012*

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 (*Attachment 2*) ☐ No If no, date expected _____

English Summary of Application.

X Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

X Yes ☐ No If no, date expected _____

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

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.

X Yes ☐ No If no, date expected _____

28. SIGNATURE



Erik Madsen

**V.P. Sustainable
Development EHS**

15/12/2011

Name (Print)

Title (Print)

Signature

Date