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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No: 2AM-MRY1325 /
Amendment No.1

July 31, ~~2014~~ 2015

By Courier, Email and Regular Mail

Honourable Bernard Valcourt, PC, QC, MP
Minister of Aboriginal Affairs and Northern Development Canada
21st Floor, 10 Wellington
Gatineau, Quebec K1A 0H4

Email: Bernard.valcourt@parl.gc.ca

Subject: Amendment No.1 to Type "A", Water Licence No. 2AM-MRY1325, Issued to Baffinland Iron Mines Corporation for the Mary River Project

Dear Honourable Minister Valcourt:

Please find attached a copy of Amendment No.1 to Type "A" Water Licence No. 2AM-MRY1325 (the Amended Licence), duly issued by the Nunavut Water Board to Baffinland Iron Mines Corporation(BIMC) for a Mining undertaking at the Mary River Project in accordance with Schedule 1 of the *Nunavut Waters Regulations*. The Amended Licence authorizes BIMC to use Water and deposit Waste in support of all phases of the undertaking, which include the Construction, Early Revenue, Operations, Closure, Reclamation, and Post-Closure Monitoring Phases, of the Mary River Project, which is located approximately 160 kilometres from the Hamlet of Pond Inlet, in the Qikiqtani Region, Nunavut.

In its decision to issue the Amended Licence, the Board considered the outcome of its review process as well as determinations made by the Nunavut Planning Commission (NPC) and the Nunavut Impact Review Board (NIRB) with respect to the Amendment Application. NPC in its correspondence to the Board, dated October 6, 2014, indicated that

the positive Conformity Determination issued to the Project on May 16, 2014 remains

applicable to the Amendment Proposal. In addition to the November 6, 2014, Amended Project Certificate issued by the NIRB to the Project, the NIRB issued a 12.4.3 Screening Exemption Decisions for the Amendment Application pursuant to section 12 of the *Nunavut Land Claims agreement*, on September 11, 2014.

In accordance with section 56 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, the Amended Licence referred to above requires your approval in order to take effect and be valid. As such, the NWB submits the attached Reasons for Decision including Records of Proceedings rendered by the Board, and a copy of Licence No. 2AM-MRY1325 – Amendment No.1 for your consideration.

If you have any questions with regards to the above, please contact the undersigned in writing.

Sincerely,

Thomas Kabloona
Nunavut Water Board, Chair

Cc: Qikiqtani Distribution List

Enclosures: Water Licence No. 2AM-MRY1325 – Amendment No 1
Reasons for Decision Including Record of Proceedings

NUNAVUT WATER BOARD

LICENCE NO. 2AM-MRY1325 – AMENDMENT NO. 1

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Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to:

BAFFINLAND IRON MINES CORPORATION

(Licensee)

SUITE 300 – 2275 UPPER MIDDLE ROAD EAST OAKVILLE ONTARIO, CANADA L6H 0C3

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use Water or deposit Waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	**2AM-MRY1325, TYPE "A" – AMENDMENT NO. 1**
Water Management Area:	**GIFFORD SOUND (21) AND ECLIPSE SOUND (48)WATERSHEDS**
Location:	**MARY RIVER PROJECT QIKIQTANI REGION, NUNAVUT**
Purpose:	**WATER USE AND THE DEPOSIT OF WASTE**
Description:	**MINING UNDERTAKING**
Quantity of Water not to be Exceeded:	**CONSTRUCTION PHASE: 689,000 CUBIC METRES ANNUALLY; EARLY REVENUE PHASE: 547,500 CUBIC METRES ANNUALLY; OPERATIONS PHASE: 353,000 CUBIC METRES ANNUALLY**
Date of Amendment No.1 Issuance:	**JULY 21, 2015**
Expiry of Licence:	**JUNE 10, 2025**

This Licence Amendment No.1 issued **(Motion Number 2015-14-P4-07)** and recorded at Gjoa Haven, Nunavut includes and is subject to the annexed conditions.

Thomas Kabloona
Nunavut Water Board, Chair

APPROVED BY:

Minister of Aboriginal Affairs and Northern Development Canada

DATE LICENCE APPROVED:

PART A. SCOPE, DEFINITIONS, AND ENFORCEMENT

1. SCOPE

a. This Amended Licence ("Licence No. 2AM-MRY1325 – Amendment No.1" or the "Licence") authorizes Baffinland Iron Mines Corporation (the "Licensee" or "BIMC" or the 'Applicant") to use Water and deposit Waste in support of a Mining undertaking at the Mary River Project (Project) in accordance with the relevant scope of activities and facilities included and authorized in the Original Type "A" Water Licence Application submitted to the NWB on February 17, 2012 and Amendment No.1 Application submitted to the NWB on July 17, 2014.

The Mary River Project is located approximately 160 kilometres south of the Hamlet of Pond Inlet and 1000 kilometres north of the City of Iqaluit, in the Qikiqtani Region of Nunavut, with geographical coordinates generally as follows:

	Latitude	**Longitude**
Overall Project Extents	72° 05' 00" N	77° 45' 00" W
	72° 05' 00" N	81° 00' 00" W
	69° 49' 00" N	81° 00' 00" W
	69° 49' 00" N	77° 45' 00" W
Camp	**Latitude**	**Longitude**
Milne Port Camp	71° 52' 53.06" N	80° 54' 4.36" W
Mine Site Exploration Camp	71° 19' 30" N	79° 22' 40" W
Mine Site Construction Camp	71° 18' 50.39" N	79° 17' 11.35 W
Mine Site Permanent Camp	71° 18' 50.39" N	79° 17' 11.35 W
Ravn River Camp	71° 07' 49.25" N	78° 22' 2.76" W
Mid-Rail Camp	70° 58' 20" N	78° 22' 15" W
North Cockburn Camp	70° 34' 58.11" N	78° 21' 28.80" W
South Cockburn Camp	70° 27' 52.47" N	78° 22' 24.13" W
Steensby New Camp	70° 19' 1.42" N	78° 25' 48.6" W
Steensby (Existing Camp)	70° 17' 40.55" N	78° 29' 21.88" W
Steensby (46 Person Camp)	70° 19' 36.92" N	78° 29' 9.30" W

The Licence authorizes Baffinland Iron Mines Corporation to undertake construction, operations, closure and reclamation of an open-pit, iron ore mine including related infrastructure and facilities and an Early Revenue Phase (ERP), at the Mary River Project (Project). The activities and facilities included under the scope of this Licence are as follows:

Scope of Original Type "A" Water Licence No. 2AM-MRY1325

- Water supply for domestic uses and industrial purposes at the Milne Port (Milne Inlet) Site, Mine (Mary River) Site, Steensby Port (Steensby Inlet) Site and the railway camps;

- Site drainage and surface water management for the Milne Port, Mine Site, Steensby Port, and relevant minor project sites;
- Sewage Treatment Facilities for the Milne Port camp, the Mine Site exploration, construction, and permanent camps; the Steensby Port construction and permanent camps; and the railway camps;
- Oily water treatment facilities for wastewater and oily storm water treatment for maintenance facilities and fuel storage berms at the Milne Port Site, the Mine Site and the Steensby Port Site;
- Storage and management of hazardous materials at the Milne Port Site and Mine Site;
- Landfarm Facilities for the deposition and treatment of hydrocarbon contaminated snow and soil at the Milne Port Site, the Mine Site, and Steensby Port Site;
- Fuel tanks, dispensing storage facilities and associated secondary containment areas or berms for Bulk Fuel Storage Facilities and day tanks at the Milne Port Site, the Mine Site, and the Steensby Port Site;
- Containment areas for temporary storage of hazardous/nonhazardous waste (waste transfer areas) and new product storage for drums and totes at Milne Port Site, the Mine Site, and Steensby Port Site;
- Ongoing decommissioning of existing and historic camp infrastructure (Fuel bladder farm and ancillary facilities and more) at the Milne Port Site;
- Explosives storage and explosives manufacturing facilities at the Mine Site and Steensby Port Site;
- Waste sorting facilities and temporary storage facilities for hazardous wastes at the Mine site;
- Landfills for disposal of solid waste at the Mine Site and Steensby Port Site;
- Incinerator Systems for camp and combustible wastes at the Milne Port Site, the Mine Site, Steensby Port Site, and railway construction camps;
- Waste rock stockpile and waste rock pile runoff management at the Mine Site;
- Ore Stock pile runoff management at the Mine Site & the Steensby Port Site;
- Secondary Containment for fuel storage and hazardous materials (if any) at each rail camp location;
- Waste Disposal Facilities for each proposed camp along the railway corridor;
- Water course crossings including pipelines, jetties, bridges; roads associated with channels; and bank alterations, culverts, spurs, erosion control, and, artificial accretion;
- Flood control, diversions, alteration of flow or storage by means of dykes or dams;
- Ongoing inspection and maintenance of all water course crossings and associated infrastructure;
- Tote Road (approximately 100 km all-weather road), which extend from the Mine Site to Milne Port Site in its current form except for routine maintenance and minor upgrades for the transportation of equipment during the Construction Phase of the project;
- Ongoing activities in support of engineering and scientific studies for the Project; and
- Ongoing maintenance to existing project infrastructure.

Additional Scope Incorporated from Licence No. 8BC-MRY1416-

- 299 m^3 / day of Water for domestic and industrial purposes during construction activities occurring at Milne Port and related to the Early Revenue Phase (ERP) of the wider Mary River Project including earthworks, laydown areas, concrete and production;
- Continued operation of the Matrix Camp (Camp) erected in 2013 for construction activities and expansion of the camp to support additional manpower of up to 350 persons during site preparation work but less than 225 persons during the construction of infrastructure at Milne Port;
- Construction and eventual operation of an additional Waste Stabilization Pond at Milne Inlet (Milne Port);
- Construction of ore stockpile areas and associated sedimentation ponds, permanent ore dock, Ship loading facilities and associated earthworks activities, ore reclaiming conveying equipment, at Milne Inlet (Milne Port); and
- Deposit of Waste during construction activities.

Additional Scope Incorporated for the ERP Based on Application to Amend Licence No. 2AM-MRY1325

Milne Port Site:

- Water use from specified sources or Water bodies for dust suppression or control along the Tote Road during the Early Revenue Phase;
- Management of ore stockpile runoff at the Milne Port site;
- Recommissioning of an existing Rotating Biological Contactor (RBC) type Sewage Treatment Plant located at the Milne Port site;
- Construction of an additional Polishing Waste Stabilization Pond (PWSP) to treat off-specification effluent as allowed and described above under the scope of Type "B" Licence No. 8BC-MRY1416. The PWSP will be of similar capacity and design specifications to the one constructed in 2013;
- Relocation of the treated sewage Effluent discharge, from a location north of the old airstrip to north of the Milne Tank Farm;
- Additional fuel storage to include the installation of two 100,000 L marine diesel tanks;
- Construction of a 4-million tonne, ore stockpile pad, associated drainage structures, and two (2) settling or sedimentation ponds; and
- Construction and operation of an ore dock and ore loading system as allowed under the scope of Licence No. 8BC-MRY1416, and additional ancillary buildings, and maintenance facilities required for the shipment of iron ore;

Tote Road

- Tote Road (approximately 100-kilomere, all-weather road), which extends from the Mine Site to the Milne Port Site in its current form except for routine maintenance and minor upgrades being required primarily for the purpose of safety and ensuring compliance with applicable safety regulations under the *Mine Health and Safely Act* and relevant regulations intended to support the

safe transportation of equipment during construction and transportation of ore extracted under the Early Revenue Phase of the Project; and
- Withdrawal of up to 1,500 m^3/day of Water from several specific Water bodies located along the Tote Road, for use in dust suppression or control;

Mine Site
- Extended use, beyond timeframe previously anticipated, for some infrastructure and/or facilities established for the Project, such as camps, buildings, fuel and transitional fuel storage facilities;
- Use of transitional fuel storage facilities; and
- Discharge of treated sewage effluent onto land during the winter months in accordance with the relevant terms and conditions included the licence

Additional minor changes have been included in this Amended Licence so as to fully integrate the Existing and Amended Licences, as discussed in the Decision associated with the Licence.

b. This Licence is issued subject to conditions contained herein with respect to the taking of Water and the depositing of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Act, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed subject to such requirements.

c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines and directives.

2. DEFINITIONS

a. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

3. ENFORCEMENT

a. Failure to comply with this Licence will be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act.

b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.

c. For the purpose of enforcing this Licence and with respect to the use of Water and deposit of Waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable laws.

PART B. GENERAL CONDITIONS

1. This Amended Licence incorporates the entire scope of Type "B" Water Licences Nos. 8BC-MRY1314 and 8BC-MRY1416, issued to the Mary River Project for construction and site preparation work; specific elements of the scope of Type "B" Licence No. 2BB-MRY1114 (currently replaced by Licence No 2BE-MRY1421), issued to the Project for the Exploration and Bulk Sample Programs; most of the scope of the Existing Type "A" Water Licence No. 2AM-MRY1325, and most of the scope of Amendment No.1 Application, which includes the Early Revenue Phase (ERP) activities and facilities. To the extent that any required reports, studies or plans having not yet been received and accepted or approved by the Board, the requirements associated with such documents are now brought forward under this Amended Licence.

2. In the event of a conflict amongst the Type "B" Licences, the Existing Licence and the Amended Licence referred to in Part B, Item 1, the terms and conditions of the Amended Licence will prevail unless otherwise advised by the Board in writing.

3. The amount of Water use fees shall be determined and payment of those fees shall be made in accordance with section 12 of the Regulations.

4. The Licensee shall file an Annual Report with the Board no later than the 31st of March in the year following the calendar year being reported. The Annual Report shall be developed in accordance with Schedule B.

5. The Licensee shall maintain a copy of this Licence at the sites of operation at all times, in English, Inuktitut, and French.

6. Any communication with respect to this Licence shall be made in writing to the attention of:

   Manager of Licensing
   Nunavut Water Board
   P. O. Box 119
   Gjoa Haven, NU X0B 1J0
   Telephone: (867) 360-6338
   Fax: (867) 360-6369
   Email: licensing@nwb-oen.ca

7. Any notice made to an Inspector shall be made in writing to the attention of:

   Water Resources Officer
   Nunavut District, Nunavut Region
   P.O. Box 100
   Iqaluit, NU X0A 0H0
   Telephone: (867) 975-4295
   Fax: (867) 979-6445

8. The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board or as otherwise requested by the Board in writing. Reports and/or studies submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, and French.

9. This Licence is assignable as provided in section 44 of the Act.

10. The Licensee shall notify the NWB of any major or significant changes in development plans, phase, or conditions associated with the Project, including commencement of the full Operations Phase and other phases associated with the Project, at least sixty (60) days prior to carrying such changes.

11. The Licensee shall post signs in the appropriate areas to inform the public of the location of infrastructure and/or facilities designed to contain, withhold, divert or retain Water and/or Waste. All signs must be in English, Inuktitut, and French.

12. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted for approval/acceptance, cannot be undertaken without subsequent written Board approval and/or direction. The Board may alter or modify a Plan if necessary to achieve the objectives of the Licence or other regulatory instruments. For plans submitted for Board approval, the Board will notify the Licensee in writing of the Board's approval, rejection, or alteration of the Plan. Plans or drawings submitted to the Board for review and/or comments do not necessarily require Board approval prior to implementation; however, the Board may request revisions to those Plans, as required.

13. In the event that a Plan submitted for approval is not approved by the Board, the Licensee shall provide a revised version of the Plan to the Board for review within thirty (30) days of notification by the Board or within the timeframe specified in the Board's notification.

14. The Licensee shall, for all Plans submitted for approval under this Licence, implement the Plan as approved by the Board in writing. The Board has approved under this Licence or carried forward from the Existing Licence the following Plans for implementation under the relevant sections in the Amendment Licence:

    a. *Emergency Response Plan* (BAF-PH1-840-P16-0002, Rev 0), March 3, 2015;
    b. *Spill Contingency Plan* (BAF-PH1-840-P16-0036, Rev 1), March 16, 2015;
    c. *Surface Water and Aquatic* Ecosystems Management Plan (BAF-PH1-830-P16-0026, Rev 3);
    d. *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;
    e. *Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;
    f. *Life-of Mine Waste Rock Management Plan* (BAF-PH1-830-P16-0031, Rev 0), April 30, 2014;
    g. Baffinland Iron Mines Corporation Mary River Project Attachment 5: Environmental Monitoring Plan (EMP) Appendix 10D-12, dated January 2012;
    h. *Environmental Protection Plan* (BAF-PH1-830-P16-0008, Rev 0), July 15, 2014;

i. *Borrow Pit and Quarry Management Plan* (BAF-PH1-830-P16-0004, Rev 0), March 20, 2014;
j. Baffinland Iron Mines Corporation Mary River Project Operations and Management Plan Milne Inlet Quarry (Q1), dated January 12, 2012;
k. Baffinland Iron Mines Corporation Mary River Project Operations and Management Plan Mary River Mine Site Quarry (QMR2) dated January 12, 2012;
l. Baffinland Iron Mines Corporation Mary River Project Operations and Management Plan Steensby Inlet Quarry (QS2), dated January 12, 2012;
m. Baffinland Iron Mines Corporation Mary River Project Quarry Operations and Management Plan: Quarry Q7 + 500, dated January 11, 2012;
n. Baffinland Iron Mines Corporation Mary River Project Quarry Operations and Management Plan: Quarry Q133 +500, dated January 11, 2012;
o. Baffinland Iron Mines Corporation Mary River Project Quarry Operations and Management Plan: Quarry Q77 +200, dated February 2012;
p. Preliminary Mine Closure and Reclamation Plan Appendix 10G, dated February 2012;
q. *Hazardous Materials and Hazardous Waste Management Plan* (BAF-PH1-830-P16-0011, Rev 3), March 20, 2015
r. Aquatic Effects Monitoring Program Framework, dated February 2013.
s. *Phase 1 Waste Rock Management Plan* (BAF-PH1-830-P16-0029, Rev 0), April 30, 2014;

15. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and condition imposed upon approval of a Plan by the Board shall become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.

16. The Licence shall refer to the Schedules attached to this Licence for instructive details and interpretive guidance regarding requirements associated with specific terms and conditions included in the main body of the Licence. If the Board subsequently determines that an item included in a Schedule requires revision in order to better reflect the intent and objectives of the Licence, the Board may at its discretion and upon providing written notice to the Licensee and interested parties, revise the Schedule accordingly. Unless the Board directs otherwise, such revision may not necessarily be construed as an "amendment" to the Licence.

17. The Licensee shall review the Plans or Manuals referred to in this Licence as required by changes in operation and/or technology and modify the Plans or Manuals accordingly. Revisions to the Plans or Manuals are to be submitted in the form of Addenda to be included with the Annual Report required by Part B, Item 4, complete with a revisions list detailing where significant content changes are made.

18. The Licensee shall confirm that all document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.

19. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

PART C. CONDITIONS APPLYING TO SECURITY

1. Subject to the conditions set out in Part C, Items 2 and 3, the Licensee shall furnish and maintain security with the Minister in the form that is satisfactory to the Minister or that is in accordance with the applicable regulations, in the following amounts:

    a. within thirty (30) days following notification by the Board, the Licensee shall post with the Minister and the Qikiqtani Inuit Association, additional financial security to that already posted under the Licence in the amount and form as determined by the Annual Security Review process referred to in Part C, Item 1(b), or Part C, Item 1(c), and/or based on the written notification from the Board and stipulations included the section pertaining to reclamation in the Board's Reasons for Decision for the Amended Licence;

    b. for each subsequent year, the amount of financial security to be held under this Part shall be reviewed by the Board in accordance with the requirements of Schedule C and adjusted to reflect the results of the Annual Security Review conducted in accordance with Schedule C; and

    c. the Board may waive the requirements to hold the Annual Security Review referred to in Part C, Item 1(b) provided that adequate rationale is given to stakeholders and interested parties in advance of doing so including the determination that the Project's scope proposed for a particular year may result in only negligible changes to the amount of financial security already posted and create no unsecured environmental risk or liabilities to the public and stakeholders.

2. Where the Licensee files evidence, in writing with the Board and with notice to the Minister and the Qikiqtani Inuit Association that the Licensee has furnished and maintained security with the Qikiqtani Inuit Association in an amount that the Qikiqtani Inuit Association confirms is sufficient to secure the mine closure and reclamation costs (including cumulative and legacy liabilities) estimated for the upcoming year to be required for the portion of the Project located on Inuit-owned lands, the Board may reduce the amount of security required to be held under Part C, Item 1. The Board shall ensure that the reduced amount of security furnished under Part C, Item1 is equal to the estimated anticipated mine closure and reclamation costs (including cumulative and legacy liabilities) for the portion of the Project located on Crown-owned lands for the upcoming year.

3. In addition to the Annual Security Review set out in Schedule C, the Licensee may, at any time, submit to the Board for consideration and approval, a request to change the amount of security outlined in Part C, Item 1. The submission shall include supporting evidence to justify the request, and the Minister and the Qikiqtani Inuit Association will be consulted by the Board during the Board's consideration of this request.

4. The security furnished and maintained with the Minister, under Part C, Item 1, shall be maintained until such time as it is fully or in part refunded by the Minister pursuant to section 76(5) of the Act. This clause shall survive the expiry of this Licence or renewals

thereof and until full and final reclamation has been completed to the satisfaction of the Minister.

5. In the event that the amount of security required to be held under Part C, Item 1 is reduced on the basis of evidence that the Licensee has furnished and maintained security with the Qikiqtani Inuit Association as set out under Part C, Item 2, the Licensee is required to provide the Board and the Minister with sixty (60) days written notice prior to any material change affecting the security arrangements between the Licensee and the Qikiqtani Inuit Association, including, but not limited to the form of security, quantum of security or terms associated with holding, accessing or releasing the security.

6. If the Board determines it to be necessary, or upon the request of the Licensee, the Minister or the Qikiqtani Inuit Association, the Board may issue further directions under this Part with respect to the amount of security to be furnished and maintained under the Licence.

PART D. CONDITIONS APPLYING TO CONSTRUCTION AND OPERATIONS

1. All final design and construction drawings shall be stamped and signed by a Professional Engineer.

2. The Licensee shall submit to the Board for review and acceptance, at least sixty (60) days prior to construction or in a timeframe otherwise approved by the Board in writing, final design and for-construction drawings, stamped and signed by a Professional Engineer, for all infrastructure and/or facilities designed to contain, withhold, divert or retain Water and/or Waste, as authorized under the Licence.

3. Quarrying activities shall be conducted in accordance with all applicable legislation, guidelines and industry standards including the *Northern Land Use Guidelines, Pits and Quarries* (INAC, 2009).

4. The Licensee shall implement sediment and erosion control measures, as required, prior to and during all Phases of the Mary River Project to prevent and/or minimize sediment loading into Water.

5. The Board has approved, with the issuance of the Amended Licence or the ccarried forward from the Existing Licence, the following Plans:

   a. *Borrow Pit and Quarry Management Plan (*BAF-PH1-830-P16-0004, Rev 0), March 20, 2014;
   b. *Baffinland Iron Mines Corporation Mary River Project Operations and Management Plan Milne Inlet Quarry (Q1),* dated January 12, 2012;
   c. *Baffinland Iron Mines Corporation Mary River Project Operations and Management Plan Mary River Mine Site Quarry (QMR2),* dated January 12, 2012;
   d. *Baffinland Iron Mines Corporation Mary River Project Operations and Management Plan Steensby Inlet Quarry (QS2),* dated January 12, 2012;

e. *Baffinland Iron Mines Corporation Mary River Project Quarry Operations and Management Plan: Quarry Q7 + 500*, dated January 11, 2012;
f. *Baffinland Iron Mines Corporation Mary River Project Quarry Operations and Management Plan: Quarry Q133 +500*, dated January 11, 2012;
g. *Baffinland Iron Mines Corporation Mary River Project Quarry Operations and Management Plan: Quarry Q77 +200*, dated February 2012; and
h. *Phase 1 Waste Rock Management Plan* (BAF-PH1-830-P16-0029, Rev 0), April 30, 2014.

6. The Licensee shall submit to the Board for review, an addendum to the Plan referred to in Part D, Item ~~6a~~ 5a for any quarry site selected for future development that the plan does not adequately address. If the content of the existing quarry plan referred to under Part D, Item ~~6a~~, 5a does not adequately address the proposed activities for the management requirements of the selected Quarry site, the Licensee shall submit to the Board for approval, a site-specific Quarry management plan.

7. The Licensee shall inspect daily, the areas of the Mary River Project site affected activities during the Construction, Operations and other phase of the project, including the Early Revenue Phase, for signs of erosion.

8. The Licensee shall implement preventive and mitigation measures to prevent any Wastes associated with the undertaking from entering any Water bodies.

9. The Licensee shall locate equipment storage areas on gravel, sand or other durable land, at a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any Water body in order to minimize impacts on surface drainage and Water quality.

10. The Licensee shall minimize disturbance to terrain, permafrost and drainage during movement of contractors' equipment and personnel around the site, including the railway corridor, during all phases of the Project.

11. The Licensee shall not store material on the surface of frozen streams or lakes except what is required for immediate use.

12. The Licensee shall use fill material for construction from approved sources that have been demonstrated by appropriate geochemical analyses to not possess Acid-Generating and Metal Leaching properties.

13. The Licensee shall maintain a minimum thirty-one (31) metre undisturbed buffer zone between the periphery of Quarry sites and the ordinary High Water Mark of any Water body unless otherwise approved by the Board in writing. The Licensee shall not excavate and/or remove material from any Quarry beyond a depth of one (1) meter above the ordinary High Water Mark or above the groundwater table, to prevent the potential contamination of groundwater unless otherwise approved by the Board in writing. The Licensee shall construct and operate the Mine Site and associated infrastructure and facilities in accordance with all applicable legislation and industry standards.

14. All surface runoff from Quarry activities associated with the Project, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the Effluent quality limits under Part D, Item 15.

15. All surface runoff during all phases of the Project, where flow may directly or indirectly enter a Water body, shall be sampled Weekly and not exceed the following Effluent quality limits:

Table 1: Effluent Quality Limits for Surface Runoff during Construction Phase

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50	100
Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

16. The Licensee shall supervise and field check through an appropriately qualified Engineer, all construction of Engineered Structures in such a manner that the Project specification can be enforced, and where required, the quality control measures followed.

17. The Licensee shall submit a Construction Summary Report to the Board, within ninety (90) days following the completion of any structure designed to contain, withhold, divert or retain Waters or Wastes, as authorized by the Board. The construction summary report shall be prepared by an Engineer(s) in accordance with Schedule D, Item 1.

18. The Licensee shall conduct inspections of earthworks and geological and hydrological regimes of the Project Biannually during the summer or as otherwise approved by the Board in writing. The inspection shall be conducted by a Geotechnical Engineer and the inspection report shall be submitted to the Board within sixty (60) days of the inspection, including a cover letter from the Licensee outlining an implementation plan to respond to the Engineer's recommendations.

19. The Licensee shall prevent any chemicals, fuel or Wastes associated with the undertaking from entering any Water body.

20. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such that impact on surface drainage is minimized.

21. The Licensee shall undertake necessary corrective measures to mitigate impact on surface drainage resulting from the Licensee's activities.

22. For the purposes of culvert and bridge installations, the Licensee shall not encroach on the natural channel width by the placement of abutments, footings or armoring below the ordinary High Water Mark.

23. The Licensee shall construct and operate all infrastructure and Facilities authorized by the Board that are designed to contain, withhold, divert or retain Water and/or Waste, in accordance with all applicable legislation and industry standards.

24. The Licensee shall construct and operate the Bulk Fuel Storage Facilities in accordance with all applicable legislation and industry standards, including:

    a. CCME *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products* (2003); and
    b. National Fire Code of Canada (2010).

25. The Licensee shall prevent the deposition of debris or sediment from entering into or onto any Water body, with respect to the construction of access roads, site laydown pads and areas or other earthworks. These materials shall be disposed of at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a manner that they do not enter the Water.

PART E. CONDITIONS APPLYING TO WATER USE AND MANAGEMENT

1. The Board has approved the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015, submitted as additional information with the 2014 Annual Report.

2. The Board has approved the Plan entitled *Surface Water and Aquatic* Ecosystems Management Plan (BAF-PH1-830-P16-0026, Rev 3), submitted as additional information with the 2014 Annual Report.

3. The Licensee shall obtain all fresh Water for domestic camp use and industrial purposes, during the Construction Phase of the Project, in amounts and from the sources described in Table 2, or from sources otherwise approved by the Board in writing. In addition to the source-specific limits prescribed in Table 2, the Licensee is authorized to use up to one thousand eight hundred and eighty-eight (1,888) cubic metres of Water per day, to a maximum of six hundred and eighty-nine thousand (689,000) cubic metres of Water annually, during the Construction Phase of the Project.

Table 2: Water Use Authorized for Domestic and Industrial Purposes during Project Construction Phase

Site	Source	Volume (m^3/day)	Combined Volume (m^3/year)
Milne Port (Milne Inlet)	Phillips Creek (summer)	367.5	~ 134,000
	Km 32 Lake (winter)		
Mine Site (Mary River)	Camp Lake	657.5	240,000
SteensbyPort (Steensby Inlet)	ST 347 Km Lake	435.8	155,400
	3 km Lake		
Ravn River	Camp Lake	145.2	
Mid-Rail	Nivek Lake (summer)	79.5	
	Ravn Camp Lake (winter)		
Cockburn North (Tunnels Camp)	Cockburn Lake	101.4	
Cockburn South Camp	Cockburn Lake	111.1	
Annual Total		**~ 689,000 m^3/Annually**	

4. Licensee shall provide notice to the Board, as required under Part B, Item 10, in advance of using fresh Water for domestic camp use and industrial purposes during the Operations Phase of the Project in amounts and from the sources described in Table 3, or from sources otherwise approved by the Board in writing. In addition to the source-specific limits prescribed in the Table 3, the Licensee is authorized to withdraw up to nine hundred and sixty-seven (967) cubic metres of water per day, to a maximum of three hundred and fifty-three thousand (353,000) cubic metres of Water annually, during the Operations Phase of the Project.

Table 3: Water Use for Domestic and Industrial Purposes during Project Operations Phase

Site	Source	Monitoring Program Station	Volume (m^3/day)		Combined Volume (m^3/day)
			Domestic	Industrial	
Milne Port (Milne Inlet)	Phillips Creek (summer)	MP-MRY-2	300	67.5	367.5
	Km 32 Lake(winter)	MP-MRY-3			
Mine Site (Mary River)	Camp Lake	MS-MRY-1	203.8	151.6	355.4
Steensby Port (Steensby Inlet)	ST 347 Lake permanent camp)	SP-01	101	142.6	243.6
	3 Km Lake)				
Total (m^3/day)			**604.8**	**361.7**	**~ 967**
Total (m^3/year)			**220,752**	**132,021**	**~ 353,000**

5. The Licensee may recycle water and use reclaimed water from the various Treatment Facilities, surface water management ponds and embankment dams and approved discharge locations under the licence if such waters meet appropriate discharge criteria for those facilities.

6. The Licensee shall equip all Water intake hoses with screens of an appropriate mesh size, consistent with the requirements of Fisheries and Ocean (DFO) Canada's *Freshwater Intake End-of-Pipe Fish Screen Guidelines* (1995), to prevent the entrainment of fish and control withdraw of Water at rates such that fish do not become impinged on the screen.

7. The Licensee shall document separately the use of Waters on, in or flowing through Inuit-owned lands and Crown Lands as required under Part I, Item 7 in the Licence.

8. Streams or Water Bodies cannot be used as a Water source unless authorized and approved by the Board in writing.

9. The Licensee shall notify the Inspector and the Board at least ten (10) days in advance of using Water from any sources not identified in the Application or requiring approval as per Part E, Item 8.

10. The Licensee shall update or revise annually following the commencement of the Operations Phase and/or the Early Revenue Phase, the Project Block-flow Diagram Water Supply Balance information for the various Project sites provided with the Application, and submit the revisions, for review by the Board, with the Annual Report under Part B, Item 4.

11. The Licensee shall carry out weekly inspections of all structures designed to contain, withhold, divert or retain Waters or Wastes during periods of flow and maintain records of the inspections and findings, for review upon the request by the Board or an Inspector.

12. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.

13. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.

14. The Licensee shall, where the use of Water of a sufficient volume would likely result in the drawdown of the source Water body involved or dewatering of the specific Water body is anticipated, submit the following for the approval of the Board in writing:

    a. the volume of Water required;
    b. a hydrological overview of the Water body;
    c. details of impact; and
    d. Proposed mitigation measures.

15. The Licensee shall, for winter-lake and stream crossings, including ice bridges, construct entirely of water, ice or snow and minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.

16. The Licensee shall not utilize any equipment or vehicles in the course of this undertaking unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall cease if rutting occurs.

17. The Licensee shall designate an area for the deposition of excavated and stockpiled materials that is at least thirty-one (31) metres above the ordinary High Water Mark of any water body.

18. The Licensee shall not cut any stream bank or remove any material from below the ordinary High Water Mark of any Water body.

19. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.

20. The Licensee shall limit any in-stream activity, as much as possible, to low Water periods. In-stream activity is prohibited during fish migration.

21. The Licensee shall locate stream crossings to minimize approach grades. Approaches shall be stabilized during construction and upon completion of Project activities, to control runoff, erosion and subsequent siltation to any Water body.

22. The Licensee shall not permit machinery to travel up the stream bed and fording of any Water body is to be kept to a minimum and limited to one area. Equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks.

23. The Licensee shall provide to the Board for review, for-construction design drawings for stream culverts, bridges and any other structures, which may impact the quantity, quality and flow of water, at least thirty (30) days prior to construction.

24. The Licensee shall submit to the Board for review, at least thirty (30) days prior to implementation, copies of separate Blasting Management Plans developed for the mining operation, tunnelling of the railway and blasting near water bodies as committed to during the Public Hearing.

25. The Licensee is authorized to withdraw up to 1,500 m^3 / day to a maximum of 547,500 m^3 annually of Water specifically for use in dust suppression or control along the Tote Road during the Early Revenue Phase (ERP) of the Project. Water for dust suppression or control shall be obtained from the sources in accordance with thresholds established in Table 2-3.

Table 2-3: Water use Authorized for Dust Suppression

Site	Source	Prosed Maximum Volume (m^3/day)	Restriction
Tote Road	Phillip's Creek	212	None
	Km 32 Lake	364	
	CV128	579.5	
	CV099	110	June –July only during low flow(less than mean flow) years
	CV087	90	
	CV078	75	
	Katiktok Lake	318	None
	BG50	150	
	BG32	120	June –July only during low flow(less than mean flow) years
	CV217	130	None
	Muriel Lake	212	
	David Lake	132	June –July only during low flow(less than mean flow) years
	BG17	75	

	CV233 (Tom River)	135	None
	Camp Lake	86	

26. The Licensee shall obtain authorization from the Board in writing prior to using Water authorized under Part E, Item 25, for purposes other than that authorized in Part E, Item 25.

PART F. CONDITIONS APPLYING TO WASTE DISPOSAL AND MANAGEMENT

1. The Board has approved, the Plan entitled *Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015, submitted as additional information with the 2014 Annual Report.

2. The Board has approved the Plans entitled *Phase 1 Waste Rock Management Plan* (BAF-PH1-830-P16-0029, Rev 0), April 30, 2014, and *Life-of Mine Waste Rock Management Plan* (BAF-PH1-830-P16-0031, Rev 0), April 30, 2014, submitted as additional information with the 2014 Annual report.

3. Future updates to the Plans referenced in Part F, Item 2 should include or address changes pertaining to the following:

   a. Updates to the on-going Waste Rock Characterization Program (including the further refinement of acid rock drainage and metal leaching aspects of the foot wall and hanging wall;
   b. Any additional details on the segregation of potentially acid generating waste rock;
   c. Update to the geochemical modeling;
   d. Update on pit water quality predictions;
   e. Results of ongoing humidity cell kinetic test-work;
   f. The incorporation of on-site test pile program results with respect to ARD/ML and impacts to modeling results; and
   g. Waste Rock Storage Facilities with consideration for climate change.

4. The Board has approved the Plan entitled *Hazardous Materials and Hazardous Waste Management Plan* (BAF-PH1-830-P16-0011, Rev 3), March 20, 2015, submitted as additional information with the 2014 Annual Report.

5. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any Water body such that the quality, quantity or flow of Water is not impaired, unless otherwise approved by the Board in writing.

6. The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an Incinerator System;

7. The Licensee shall test the bottom ash generated by all Incinerator Systems, by using the acceptable test procedures for analyzing residuals, prior to being disposed of at any Landfill

Facility. If the composition of the ash makes it unsuitable for disposal at the Landfill facilities, the Licensee shall direct the Waste to an appropriate facility for disposal. The records of analytical results and volumes of ash shall be maintained and provided to an Inspector or the Board upon request.

8. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood, to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding Waters, unless otherwise approved by the Board in writing.

9. The Licensee shall treat oily water and wastewater generated by the Project at the Oily Water/Wastewater Treatment Facilities authorized under the scope of the Licence.

10. The Licensee shall submit to the Board and the Inspector, thirty (30) days prior to the removal and transfer of Waste, a declaration of authorization from any Hamlet community receiving Waste from the Project, which clearly states that authorization has been granted for the deposit of Waste by the Licensee at the Hamlet's appropriately licensed facilities.

11. The Licensee shall provide at least ten (10) days' notice to the Inspector prior to planned Discharges from any Waste Management Facility, Oily Water/Wastewater Treatment Facilities, Sewage Treatment Facilities, and any other relevant facilities associated with the Project. The notice shall include the estimated volume proposed for Discharge and the location and description of the receiving environment.

12. The Licensee shall, unless otherwise approved by the Board in writing, discharge Effluent at a distance of least thirty-one (31) metres above the Ordinary High Water Mark of any Water body, where direct flow into the Water body is not possible, such that surface erosion is minimized and no additional impacts are created.

13. The Licensee shall remove any Waste generated from temporary and permanent shelters along the Tote Road and along the railway corridor for treatment at appropriately licenced Waste Management Facilities.

14. The Licensee shall direct all Sewage generated from the relevant Project sites to the Sewage Treatment Facilities or as otherwise approved by the Board in writing.

15. The Licensee shall treat all Sewage waste generated at the Ravn River and Mid-Rail camps and Sewage generated at the Cockburn North and Cockburn South camps at either the Mine Site Sewage Treatment Facility or the Steensby Port Sewage Treatment Facility, unless otherwise approved by the Board in writing.

16. The Licensee shall provide to the Board for review, at least sixty (60) days prior to installation, detailed specifications and operational requirements for the Sewage storage tanks proposed for the Railway camps.

17. All discharge from the Sewage Treatment Facilities including the Polishing Waste Stabilization Ponds directly into fresh Water bodies at Monitoring Stations MP-01, MP-01a,

MP-MRY-04, MP-MRY-04a, MS-01, MS-01a, MS-MRY-04, MS-MRY-04a, and/or from monitoring stations as otherwise approved by the Board in writing, must not exceed the following Effluent quality limits:

Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
BOD_5	30
Total Suspended Solids	35
Faecal Coliform	1000 CFU/100 mL
Oil and Grease	No visible sheen
pH	Between 6.0 and 9.5
Ammonia (NH3-N)	4.0
Total Phosphorous (MS-01)	4.0
Total Phosphorous (MS-01a)	1.0
Toxicity	Not acutely toxic

18. All discharge from the Sewage Treatment Facilities including the Polishing Waste Stabilization Ponds at Monitoring Stations SP-01, SP-01a, and/or from monitoring stations as otherwise approved by the Board in writing, directly into the ocean or to ditches flowing into the ocean shall not exceed the following Effluent quality limits:

Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
BOD_5	100
Total Suspended Solids	120
Faecal Coliform	10,000 CFU/100 mL
Oil and Grease	No visible sheen
pH	Between 6.0 and 9.5
Toxicity	Not acutely toxic

19. Sludge generated from the Sewage Treatment Facilities or any other facilities shall be confirmed to be non-hazardous and the results provided to the Board for review prior to disposal at any Landfill Facility or as otherwise approved by the Board in writing.

20. All discharge from the Oily Water/Wastewater Treatment Facilities at Monitoring Stations MP-02, MS-02, SP-02, and/or from monitoring stations as otherwise approved by the Board in writing, must not exceed the following Effluent quality limits:

Table 6: Effluent Quality Discharge Limits for Oily Water Treatment Facilities

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
pH	Between 6.0 and 9.5
TSS	35
Ammonia	4.0
Phosphorous	4.0
Benzene	0.370
Ethylbenzene	0.090
Toluene	0.002
Oil and Grease	15 and no visible sheen
Arsenic	0.50
Copper	0.30
Lead	0.20
Nickel	0.50
Zinc	0.50

21. All discharge from the Landfill Facilities at Monitoring Stations MS-MRY-13a, MS- MRY-13b and SP-08, and/or from monitoring stations as otherwise approved by the Board in writing must not exceed the following Effluent quality limits:

Table 7: Effluent Quality Discharge Limits for the Landfill Facilities

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
pH	Between 6.0 and 9.5
Total As	0.5
Total Cu	0.3
Total Pb	0.2
Total Ni	0.5
Total Zn	0.5
Total Suspended Solids	15
Oil and Grease	No visible sheen

22. All discharge from the Bulk Fuel Storage Facilities at Monitoring Stations MP-03, MP-MRY-7, MS-03, MS-04, MS-MRY-6, SP-04 and SP-05 and/or from monitoring stations as otherwise approved by the Board in writing, must not exceed the following Effluent quality limits:

Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities

Parameter	Maximum Concentration of Any Grab Sample (ug/L)
Benzene	370
Toluene	2
Ethylbenzene	90
Lead	1
Oil and Grease	15,000 and no visible sheen

23. All discharge from the Landfarm Facilities at Monitoring Stations MP-04, MS-05 and SP-06, and/or from monitoring stations as otherwise approved by the Board in writing, must not exceed the following Effluent quality limits:

Table 9: Effluent Quality Discharge Limits for the Landfarm Facilities

Parameters	Maximum Concentration of Any Grab Sample (mg/L)
pH	Between 6.0 and 9.0
Total Suspended Solids	15
Oil and Grease	15 and no sheen
Total Lead	0.001
Benzene	0.370
Toluene	0.002
Ethylbenzene	0.090

24. All Discharge from the Bulk Sample Open Pit, Bulk Sample Weathered Ore Stockpile, Bulk Sample Processing Stockpile Area and Bulk Sample Stockpile Area Seepage and runoff from the at Milne Inlet at Monitoring Stations MS-MRY-09, MS-MRY-10, MS-MRY-11, MP-MRY-12 and/or monitoring stations as otherwise approved by the Board shall not exceed the following Effluent quality limits:

Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
Total Arsenic	0.50
Total Copper	0.30
Total Lead	0.20
Total Nickel	0.50
Total Zinc	0.50
Total Suspended Solids	15.0
Oil and Grease	No visible sheen
Toxicity	Not acutely toxic
The waste discharge shall have a pH of between 6.0 and 9.5	

25. All discharge from the Ponds associated with the Run of Mine Ore Stockpile, Ore Stockpile, West and East Sediment Ponds at Monitoring stations MS-06+, MS-07, MS-08, MS-09 and SP-07 and/or from monitoring stations as otherwise approved by the Board in writing shall not exceed the Effluent quality limits of Part F, Item ~~25~~ 24.

26. All Contact Water and surface runoff from the site Drainage and Surface Water Management Systems where flow may directly or indirectly enter a Water body, shall be sampled Weekly during the Operations Phase and/or Early Revenue Phase of the Project and must not exceed the following Effluent quality limits:

Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended	15	30
Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

27. The Licensee shall incorporate best management practices including ditches, diversions, sumps and berms where necessary to minimize or prevent surface runoff from entering nearby Water bodies from Quarry and borrow pit sites.

28. The Licensee shall remove from the project site, all Hazardous Wastes generated through the course of the Construction, Operations, and Early Revenue Phases, for disposal at an approved Waste Disposal Facility.

29. The Licensee shall maintain records of all Waste backhauled from the Mary River Project and confirmation of proper disposal through the use of Waste manifest tracking systems and registration with the Government of Nunavut – Department of Environment. These records shall be made available upon request, to an Inspector or the Board.

PART G. CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:

   a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
   b. Such Modifications do not place the Licensee in contravention of the Licence or the Act;
   c. Such Modifications are consistent with the NIRB Project Certificate;

d. The Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
e. The Board has not rejected the proposed Modifications.

2. Modifications for which any of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.

3. Applications for modifications shall contain:

a. A description of the facilities and/or works to be constructed;
b. The proposed location of the structure(s);
c. Identification of any potential impacts to the receiving environment;
d. A description of any monitoring required, including sampling locations, parameters measured and frequencies of sampling;
e. Schedule for construction;
f. Drawings of engineered structures stamped by a Professional Engineer; and
g. Proposed sediment and erosion control measures.

4. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

PART H. CONDITIONS APPLYING TO EMERGENCY RESPONSE AND CONTINGENCY PLANNING

1. The Board has approved the Plans entitled *Spill Contingency Plan* (BAF-PH1-840-P16-0036, Rev 1), March 16, 2015, and *Emergency Response Plan* (BAF-PH1-840-P16-0002, Rev 0), March 3, 2015, submitted as additional information with the 2014 Annual Report.

2. The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering water. All sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.

3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.

4. The Licensee shall perform weekly inspections of fuel containment facilities for leaks and settlement and shall keep a written log of inspections to be made available to an Inspector upon request.

5. The Licensee shall maintain and service any equipment in designated areas and shall implement special procedures (such as the use of drip pans) to manage Waste and contain potential spills.

6. If the Licensee provides notification under Part J, Item 13, the Licensee shall submit to the Board, an Addendum to the Emergency Response Plan and the Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.

7. The Licensee shall keep a copy of the Emergency Response Plan and the Spill Contingency Plan at each site of operations.

8. The Licensee shall conduct emergency maintenance and servicing on equipment, in designated areas, and shall implement measures to collect motor fluids and other Waste and prevent and contain spills.

9. If during the period of this Licence, an unauthorized Discharge of Waste and/or Effluent occurs, or if such a Discharge is foreseeable, the Licensee shall:

   a. Employ as required, the Emergency Response Plan and the Spill Contingency Plan;
   b. Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130 and to the Inspector at (867) 975-4295; and
   c. For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain, clean up and restore the spill site.

10. The Licensee shall, in addition to Part H, Item 9, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.

11. The Licensee shall implement measures to prevent or minimize any chemicals, petroleum products or wastes associated with the project from entering Water. All sumps and fuel caches shall be located at a distance of at least thirty-one (31) meters from the ordinary High Water Mark of any adjacent Water body and inspected on a regular basis.

PART I. CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING

1. The Board has approved with the issuance of the Licence, for the Construction Phase of the Project, the plan entitled *Aquatic Effects Monitoring Program (AEMP) Framework*, dated February 2013, applicable during the Construction Phase of the Project.

2. The Licensee shall submit to the Board, for approval in writing, at least sixty (60) days following approval of this Amendment, a revised version of the Plan entitled *Aquatic Effects Management Plan* (BAF-PH1-830-P16-0039, Rev 0), June 27, 2014, that addresses the relevant comments received from intervening parties during the review period for the Plan. The Plan under this condition, once approved, will supersede the Plan referenced in Part I, Item 1.

3. The Board has approved, with the issuance of the licence, the Plan entitled *Environmental Protection Plan Appendix* BAF-PH1-830-P16-0008, Rev 0), July 15, 2014, submitted as additional information with the 2014 Annual Report.

4. The Board has approved with the issuance of the licence, the Plan entitled *Baffinland Iron Mines Corporation Mary River Project Attachment: 5 Environmental Monitoring Plan Appendix 10D-12*, dated January 2012. The Plan referred to in Part I, Item 2 will supersede the Plan under this condition, once approved.

5. The Licensee shall undertake the Monitoring Program as stipulated in Schedule I.

6. The Licensee shall confirm the locations and GPS coordinates for all Monitoring stations referred to in Schedule I, and any additional monitoring stations that may be required, with an Inspector.

7. The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of Water are utilized for all purposes. The Licensee shall report these coordinates to the Inspector prior to the use of Water.

8. The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations of temporary and permanent storage and/or deposit of Wastes associated with the Mary River Project. The Licensee shall report these coordinates to the Inspector prior to depositing Waste.

9. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of Water and Waste volumes, to be operated and maintained to the satisfaction of an Inspector.

10. The Licensee shall install and maintain signs that identify the Monitoring Stations, posted in English, Inuktitut, and French.

11. The Licensee shall measure and record the following in cubic metres or as otherwise stated:

    a. The volume of fresh Water obtained from all Water sources associated with the Project. Water quantities from sources in, on or flowing through Crown Lands and those through Inuit-owned lands are to be provided separately;
    b. The volume, source, and end use of reclaim or recycled water used for any purposes under this licence;
    c. The volume of Sewage sludge removed from the Sewage Treatment Facilities;
    d. Tonnes of mineralized and un-mineralized waste rock stored at the end of the calendar year being reported; and
    e. Tonnes of ore stored at the Project sites at the end of the calendar year and the tonnes of ore shipped annually in relationship to the Project.

12. The Licensee shall undertake a geotechnical inspection of all engineered facilities designed to contain Water or Waste, to be carried out bi-annually by a Geotechnical Engineer,

between the months of July and September. The inspection shall be conducted in accordance with the *Canadian Dam Safety Guidelines,* where applicable and including the following:

a. Pit walls
b. Quarries
c. Landfills
d. Landfarms
e. Bulk Fuel Storage Facilities
f. Sediment Ponds
g. Collection ponds
h. Polishing Waste Stabilization Ponds

13. The Licensee shall submit to the Board, within sixty (60) days of completion of the geotechnical inspection referred to in Part I, Item 12, a Geotechnical Engineer's Report that shall include a cover letter from the Licensee outlining an implementation plan to address the recommendations of the Geotechnical Engineer.

14. The Licensee shall monitor and report to an Inspector, Seepage from all facilities designed to contain, withhold, divert or retain Water or Wastes and submit the results and an interpretation of the Seepage monitoring carried out, in the Annual Report required under Part B, Item 4.

15. The Licensee shall obtain a digital photographic record of all the watercourse crossings before, during, and after the completion of construction as required under Schedule D, Item 1.

16. The Licensee shall submit to an Analyst for approval, within six (6) months of the Licence issuance, an updated Quality Assurance / Quality Control Plan that includes sampling and analysis requirements and addresses additional monitoring required under the ERP and/or changes to the Project. This Plan shall be developed in accordance with the 1996 *Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" Licensees in Meeting SNP Requirements and for Submission of a QA / QC Plan* (INAC).

17. If the Analyst does not approve the Plan referred to in Part I, Item 16, the Licensee shall revise the Plan and resubmit to the Analyst for approval.

18. The Licensee shall annually review the approved Quality Assurance/Quality Control plan and modify it as necessary. Proposed modifications shall be submitted to an Analyst for approval.

19. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the most current edition of *Standard Methods for the Examination of Water and Wastewater,* or by other such methods approved by an Analyst.

20. All compliance analyses shall be performed in a Canadian Association for Environmental Analytical Laboratories (CAEAL) accredited laboratory according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.

21. The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:

    a. All data and information required by this Part and generated by the Monitoring Program in the tables of Schedule I;
    b. An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in Part F;

22. The License shall, with the assistance of an Inspector, establish additional Monitoring Stations, as may be required to effectively and adequately monitor surface runoff from the Mary River Project site(s) or discharge from Site Drainage and Surface Water Management System water associated with the Mary River Project. Within thirty (30) days of establishment of additional Monitoring Stations, the Licensee shall inform the Board and the Inspector.

23. The Licensee shall monitor runoff and/or discharge from borrow pits and rock Quarry sites, on a monthly basis, for the following parameters:

    a. Total Suspend Solid (TSS)
    b. Oil and Grease
    c. Ammonia (total NH_3-N)
    d. Nitrate (total NO_3-N)
    e. pH
    f. Conductivity; and
    g. Demonstrate to be non-acutely toxic.

24. The Licensee shall, in addition to Part I, Item 23, during periods of flow and following a major precipitation event, conduct opportunistic monitoring on a monthly basis on any observed flows related to Effluent quality limits under Part D, Item 15 and the monitoring requirements as established under Part I, Item 23, for any flows originating from borrow pits or rock quarries.

25. The Licensee shall monitor surface runoff and/or discharge of the monitoring stations downstream of construction areas at Milne Port Site and the Mary River Mine Site as indicated in Tables 13 and 14 of Schedule I, to comply with Effluent quality limits under Part D, Item 15.

26. An Inspector may impose additional monitoring requirements.

27. The Licensee shall include in the Annual Report, required under Part B, Item 4, all monitoring results and information required by this Part.

28. The NWB can modify the Monitoring Program as set out in Schedule I without a public Hearing. Requests for changes to the Monitoring Program should be forwarded to the NWB in writing, and should include the justification for the change.

PART J. CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE

1. The Board has approved, with the issuance of the Licence, the Plan entitled *Baffinland Iron Mines Corporation Mary River Project Preliminary Mine Closure and Reclamation Plan Appendix 10G* dated February 2012 as part of the Application.

2. The Licensee shall to submit to the Board for Approval in writing, within sixty (60) days following approval of this Amendment, a revised version of the Plan entitled *Interim Closure and Reclamation Plan* (BAF-PH1-830-P16-0012, Rev 3), March 19, 2015, that addresses the relevant comments and recommendations provided by intervening parties during the review period. The Plan under this section will supersede the Plan referred to in Part J, Item 1 once approved and must address all mine related components including the following:

    a. Detailed description, including maps and other visual representations, of the pre-construction conditions for each site, accompanied by a detailed description of the proposed final landscape, with emphasis on the reclamation of surface drainage over the restored area;
    b. A description of how progressive reclamation will be employed and monitored throughout the life of the mine, plus reclamation scheduling and coordination of activities with the overall sequence of the project; details of reclamation scheduling and procedures for coordinating reclamation activities within the overall mining sequence and materials balance;
    c. Implications of any updated water balance and water quality model prediction results and any adaptive management measures that may be required;
    d. An evaluation of closure and reclamation measures for each mine component, including the goals, objectives, closure criteria and the rationale for selection of the preferred measures;
    e. A comprehensive assessment of materials suitability, including geochemical and physical characterization and a schedule of availability for reclamation needs. Particular attention shall be given to cover materials, including maps showing sources and stockpile locations of all reclamation construction materials;
    f. An assessment and description of any required post-closure treatment for pit water that is not acceptable for discharge, taking into consideration further studies completed and updated modeling information;
    g. Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;
    h. Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and Ground Water, parameters;
    i. Monitoring schedules and overall timeframes;
    j. QA/QC procedures for managing the demolition landfill and other waste disposal areas;
    k. A list of non-salvageable materials and disposal locations;
    l. Rock storage facility closure design plans and sections including the types of material placed and volumes;
    m. Protocol for the disposal of any contaminated soil;
    n. An assessment of the long-term physical stability of all remaining project components;

o. A revised closure and reclamation cost estimate; and
p. A detailed implementation schedule for completion of reclamation work

3. The Licensee shall, on an annual basis, provide an annual work plan and updated estimate of anticipated mine closure and reclamation costs for the upcoming year, shall in accordance with the requirements of Schedule J.

4. The Licensee shall submit to the Board, for approval in writing, at least twelve (12) months prior to the expected end of the mining life of the Project, a Final Closure and Reclamation Plan. The plan shall incorporate revisions, which reflect the pending closed status of the mine, and include:

a. Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut *Environmental Guideline for Site Remediation*;
b. Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and
c. An evaluation of the Human Health and Ecological Risk Assessment required for the associated closure options.

5. The Licensee shall remediate hydrocarbon contaminated soils associated with the Project's bladder tank farms and treat to meet the appropriate remedial objectives consistent with the use of the remediated soil as well as the requirements of the Government of Nunavut Guidelines, or as otherwise approved by the Board in writing.

6. The Licensee shall provide to the Board, for approval in writing, at least sixty (60) days prior to commencing reclamation activities at any bulk (fuel bladder) storage facility impacted by hydrocarbon contamination, a remediation action plan that meets at minimum, the objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.

7. The Licensee shall backfill and restore, to the satisfaction of an Inspector, all sumps to the pre-existing natural contours of the land.

8. The Licensee shall, unless otherwise identified within the approved Plan under Part J, Item 1, and/or Part J, Item 2 remove all Culverts and open the natural drainage channel. In carrying out this activity, measures shall be implemented to minimize erosion and sedimentation.

9. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

10. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.

11. The Licensee shall implement progressive reclamation including re-vegetation as soon as practically possible and shall update all Plans to reflect such measures.

12. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation (2010). The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.

13. The Licensee shall notify the Board in writing, at least sixty (60) days prior to entering into a Care and Maintenance Phase.

14. Within thirty (30) days of the Licensee providing the Board with notification of the Licensee's intention to enter into Care and Maintenance, the Licensee shall provide the Board with a Care and Maintenance Plan that details the Licensee's plans for maintaining compliance with the Terms and Conditions of the Licence.

15. The Licensee shall remove from the site, all infrastructure and site materials, including but not limited to, all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of this Licence.

16. The Licensee shall notify the Board in writing, at least sixty (60) days prior to any intent to achieve Recognized Closed Mine status.

PART K. SCHEDULES

Schedule A. Scope, Definitions, and Enforcement

Definitions

In this Licence: 2AM-MRY1325 – Amendment No.1 or Amended Licence

"**Abandonment**" means the permanent dismantlement of a facility with the intent of making the facility permanently incapable of its intended use as defined in the *Mine Site Reclamation Guidelines for the Northwest Territories* (INAC, 2007). This includes the removal of associated equipment and structures;

"**Acid Rock Drainage (ARD)**" means the production of acidic leachate, seepage or drainage from underground workings, open pits, ore stockpiles, waste rock stockpiles, construction rock and other rocks used for other purposes associated with the Project that can lead to the release acidic substances into ground Water or surface Water;

"**Act**" means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

"**Acutely Lethal Effluent**" means effluent as defined in the *Metal Mining Effluent Regulations* SOR/2002-222 (2002);

"**Adaptive Management**" means a management strategy that describes a way of minimizing risks associated with uncertainty and provides a flexible framework for mitigation measures to be implemented and actions to be taken when specified thresholds are exceeded;

"**Addendum**" means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report. It is also considered as an appendix or supplement;

"**Aggregates Sources**" mean existing and/or proposed borrow pits and quarries for use in the construction of facilities and infrastructure for the Mary River Project as identified in the Application.

"**Amendment**" means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence;

"**Amended Licence**" means amendment No.1 to Licence 2AM-MRY1325, issued on July 21, 2015

"**Amendment No.1 Application**" means the application and supporting information submitted by Baffinland Iron Mine Corporation and received by the Board on July 17, 2014 to amend Licence 2AM-MRY1325;

"**Analyst**" means an Analyst designated by the Minister under section 85 (1) of the *Act*;

"**Annually**" means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;

"**Application**" means the final Type "A" Water Licence Application submitted to the NWB by Baffinland Iron Mines Corporation (BIMC) on February 17, 2012 as part of the Final Environmental Impact Statement (FEIS) for the Mary River Project.

"**Aquatic Effects Monitoring Plan (AEMP)**" means a monitoring program designed to determine the short-term and long-term effects of the Project's activities on the aquatic environment, evaluate the accuracy of impact predictions, assess the effectiveness of planned impact mitigation measures, and identify additional impact mitigation measures to avert or reduce environmental effects;

"**Batch Concrete Plant**" means mobile or stationary plants used to mix cement, aggregate, and water to produce concrete for footings, foundations, floors and other project facilities and infrastructure described in the Application;

"**Biannual**" means, in the context of monitoring frequency, one sampling event occurring every six (6) months with a minimum of one hundred eighty days between sampling events;

"**Board**" means the Nunavut Water Board (NWB) established under Article 13 of the *Nunavut Land Claims Agreement* and under section 14 of the Act;

"**Borrow Pits**" means sites for which materials, such as gravel or sand, are excavated for the purposes of constructing site infrastructure and facilities for the Mary River Project as described in the Plan entitled Plan entitled "*Baffinland Iron Mines Corporation Mary River Project Borrow Pit and Quarry Management Plan Appendix 10D-6*", dated February 2012;

"**Bulk Fuel Storage Facilities**" means the permanent fuel storage tanks, containment area and associated appurtenance constructed at the various major project sites of the Mary River Project, Milne Port, the Mine Site, and Steensby Port, for the purposes of offloading, storing and distribution of fuel;

"**Bulk Sample Open Pit**" means the excavated area formed as a result of the Bulk Sampling Program undertaken in 2007-2008 at the Mary River Site;

"**Bulk Sampling Program**" means the activities associated with the ore sample extracted from deposit No.1 during 2007-2008 for the purpose of analysing the ore constituent. The Bulk Sampling Program was allowed under Amendment No. 1 to Licence 2BB-MRY0710 issued by the NWB on July 16, 2007.

"**Bulk Sample Weathered Ore Stockpile**" means the ore stockpile located adjacent to the Bulk Sample Open Pit at the Mary River Site;

"**Canadian Council of Ministers of the Environment (CCME)**" means the organizations of Canadian Ministers of Environment that sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic

Life;

"**Care and Maintenance**" means the status of the facility when the Licensee ceases production or commercial operation temporarily as defined in the *Mine Site Reclamation Guidelines for the Northwest Territories* (INAC, 2007);

"**Closure Phase**" means when an Operator ceases operations at a facility without the intent to resume mining activities in the future as defined in the *Mine Site Reclamation Guidelines for the Northwest Territories* (INAC, 2007);

"**Construction Phase**" means any activities undertaken for the purposes of establishing or constructing components, infrastructure, and facilities required for the development of the Mary River Project open-pit mine, as described in the Application;

"**Contact Water**" means surface water or runoff that is physically or chemically affected by the Mary River Project mine development areas and activities;

"**Dams**" means engineered structures including surface water management ponds and embankment dams as described in the document entitled "Baffinland Iron Mines Corporation Mary River Project Attachment 5: Waste Rock Management Plan Appendix 10D-5, dated January 2012.

"**Dam Safety Guidelines**" means the *Canadian Dam Association (CDA) Dam Safety Guidelines (DSG), January 1999* or subsequent approved editions;

"**Deleterious Substances**" means a substance as defined in section 34(1) of the *Fisheries Act;*

"**Deposit**" means the placement of waste rock or other solids materials on land or in water;

"**Discharge**" means the release of any water or waste to the receiving environment;

"**Domestic Waste**" means all solid waste generated from the accommodations, kitchen facilities and all other site facilities, excluding any hazardous wastes generated by facilities associated with the Mary River Project;

"**Drainage and Surface Water Management System**" means the network of ditches, drains, and channels, including storm water and ore stockpile runoff system, designed and constructed to collect and manage surface runoff from project site infrastructure and facilities associated with the Project;

"**Early Revenue Phase**" refers to the phase of mining and transport of approximately 3.5 million tonnes of Iron Ore annually from the Mine Site to the Milne Port, by way of the Tote Road, in advance of the full Operational Phase of the Project;

"**Effluent**" means the liquid discharge from all site water management facilities;

"**Engineer**" means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and*

Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;

"**Engineering Geologist**" means a professional geologist registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the investigation and interpretation of geological conditions for civil engineering purposes;

"**Engineered Structure**" means any facility, designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;

"**Environmental Assessment**" means, for the purpose of this licence, the totality of the Nunavut Impact Review Board (NIRB) Public Registry as established under the authority of Article 12 of the NLCA, including all documents associated with the NIRB's assessment process for Baffinland Iron Mines Corporation Mary River Project;

"**Existing Licence**" means the pre-amended Licence No. 2AM-MRY1325;

"**Explosives Facility**" means facilities and equipment designed for the storage of Ammonium Nitrate, detonators, and explosives as well as for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO) as described in the Plan entitled "*Baffinland Iron Mines: Mary River Project Explosives Management Plan*" January 2012;

"**Final Discharge Point**" in respect of an effluent, means an identifiable discharge point of a mine beyond which the operator of the mine no longer exercises control over the quality of the effluent (Metal Mining Effluent Regulations, SOR/2002-222, 6 June, 2002);

"**Freeboard"** means the vertical distance between the water level and the top of the containment element (i.e. a liner), within a dam or any other channel or pond used for containment of site runoff;

"**Fuel Bladder Farm**" means bulk-fuel storage facility and associated infrastructure initially established at the Milne Port Site, the Mine site and Steensby Port Site under Type "B" Licence 2BB-MRY1114 and which have been transferred to the scope of activities under this Licence;

"**Geotechnical Engineer**" means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;

"**Grab Sample**" means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;

"**Greywater**" means the component of effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding sewage;

"**Ground Water**" means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;

"**Hazardous Materials**" means a contaminant which is a dangerous good that is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage;

"**High Water Mark**" means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

"**ICP Metals Scan**" means, for the purpose of the Licence, elements detected using an inductively coupled plasma (ICP) mass spectrometer. Metal parameters should be consistent with baseline data previously collected and include any other metals of concern or interest;

"**Incinerator System**" means the dual chamber high temperature system, or similar facility, designed for the purposes of combusting acceptable types of Waste generated by the Project as described in the Application including the document entitled "*Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

"**Inspector**" means an Inspector designated by the Minister under section 85 (1) of the Act;

"**Interim Closure and Reclamation Plan**" means a conceptual detailed plan on the reclamation of mine components which will not be closed until the end of the mining operations, and operational detail for components which are to be progressively reclaimed throughout the mine life, as defined in the *Mine Site Reclamation Guidelines for the Northwest Territories* (INAC, 2007);

"**Landfarm Facilities**" means engineered facilities and associated appurtenance designed and constructed for the treatment and storage of hydrocarbon impacted soil and/or water at the Milne Port, the Mine Site and Steensby Port Site as described in the Plan entitled "*Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

"**Landfill Facilities**" means engineered facilities and associated appurtenance designed and constructed for the treatment and storage non-hazardous, inert Waste at the Mine Site and Steensby Port Site as described in the Plan entitled "*Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

"**Licence**" means the Type "A" Water Licence No. 2AM-MRY1325 Amendment No.1, issued by the Nunavut Water Board in accordance with the *Act*, to Baffinland Iron Mines Corporation (BIMC) for the Mary River Project;

"**Licensee**" means the entity to which Licence Type "A" Licence No. 1 2AM-MRY1325-Amendment No.1 and associated Licence are issued or assigned;

"**Maximum Average Concentration**" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;

"**Maximum Monthly Mean**" means the average concentration of all samples collected over a thirty-day period from the identical sampling location;

"**Metal Leaching**" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;

"**Milne Port Bulk Fuel Storage Facility**" means the permanent fuel storage tanks, containment area and associated appurtenance for the offloading, storing and distribution of fuel at the Milne Port Site as depicted in drawings submitted by the Licensee and as described in the Application documents received by the Board on February 17, 2012;

"**Milne Port Bulk Sample ore Stockpile**" means the ore stockpile located at Milne Inlet (Milne Port), which is connected with the Bulk Sampling Program carried out during the 2007-2008 period;

"**Milne Port Landfarm Facility**" means the engineered structure or facility and appurtenance designed and constructed at the Milne Port Site for the storage and biological treatment of hydrocarbon impacted soil and water as described in the Plan entitled *Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

"**Milne Port Oily Water/Wastewater Treatment Facility**" refers to the engineered facility and equipment designed and constructed to treat oily water and/or wastewater generated at the Milne Port Site as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Milne Port Ore Dock Facility**" refers to the ship dock, ore loading system, and associated infrastructure generally designed and constructed, as depicted in drawing numbers H349000-2100-10-015-0001, H349000-2000-000-015-0017, and H349000-2000-00-015-0002 to facilitate the shipment of ore generated during the early revenue to phase to markets in Europe;

"**Milne Port Ore Stockpile Areas**" refers to the 4 million tonne stockpile areas as associated structures generally designed and constructed at Milne Port, as depicted in drawings numbers. H349000-2133-10-035-0001, H349000-2133-10-035-0002, H349000-2133-10-035-0003, and H349000-2133-10-035-0004, to temporarily store ore generated during the Early Revenue Phase and shipped from Milne Port Ore Dock Facility;

"**Milne Port Ore Stockpile Sedimentation Ponds**" mean the two settling ponds generally designed and constructed at Milne port for storage, and treatment if required, of runoff from the ore stockpile areas or facilities, as depicted in the drawings numbers H349000-2345-10-035-0001

"**Milne Port Potable Water Treatment Facility**" means the packaged media-filtration system and associated equipment designed and installed or constructed to treat water for domestic purposes as indicated in the Application documents including the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Milne Port Sewage Treatment Facility**" means the Rotating Biological Contactor (RBC) type treatment Plant, all polishing waste stabilization ponds and other relevant equipment designed and

installed to treat Sewage generated by the camp facilities at Milne Inlet as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Milne Port Storm Water Drainage Systems**" means the engineered infrastructures and equipment designed and constructed to collect site or surface runoff water from the Milne Port site as depicted in the drawings provided by the Applicant in its Application;

"**Mine Site Bulk Fuel Storage Facility**" means the permanent fuel storage tanks, containment area and associated appurtenance for the offloading, storing, and distribution of fuel at the Mine Site as described in the Application documents received by the Board on February 17, 2012;

"**Mine Site Bulk Sample Ore Stockpile**" means the ore stockpile located at the processing area at the Mary River Site that is associated with the Bulk Sampling Program undertaken in 2007-2008 period;

"**Mine Site Drainage System**" refers to the storm water manage systems designed and constructed to capture surface runoff from Ponds No. 1, 2, and 3, waste rock stockpile, airstrip, and other areas at the Mine site as described in the Application documents received by the Board on February 17, 2012;

"**Mine Site Landfarm Facility**" means the engineered structure or facility and appurtenance designed and constructed at the Mine Site for the storage and biological treatment of hydrocarbon impacted soil and water as described in the Plan entitled "*Baffinland Iron Mines Corporation Waste Management Plan for Construction, Operation, and Closure*" dated April 2013;

"**Mine Site Landfill Facility**" means engineered structure or facility and associated appurtenance designed and constructed at the Mine Site for the storage and treatment of non- hazardous, inert Waste as described in the Plan entitled "*Baffinland Iron Mines Corporation Waste Management Plan for Construction, Operation, and Closure*" dated April 2013;

"**Mine Site Oily Water/Wastewater Treatment Facility**" means the engineered facilities and equipment designed and constructed to treat oily water and/or wastewater generated at the Mine Site as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Mine Site Potable Water Treatment Facilities**" means the packaged media-filtration system and equipment designed and installed or constructed to treat water for domestic purposes at the Mine Site as described in the document entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Mine Site Sewage Treatment Facilities**" means the Rotating Biological Contactor type treatment Plants, all polishing waste stabilizations ponds and other relevant equipment designed and installed to treat Sewage generated by the camp facilities at the Mine site as described in the document entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Minister**" means the Minister of Indian and Northern Affairs Canada (AANDC) also referred to as Aboriginal Affairs and Northern Development Canada (AANDC);

"**Modification**" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work;

"**Monitoring Program**" means the program to collect data on surface water and Ground Water quality to assess impacts to the environment of an appurtenant undertaking;

"**Monthly**" means, in the context of monitoring frequency, one sampling event occurring every thirty (30) days with a minimum of twenty-one (21) days between sampling events;

"**Non-Contact Water**" means the runoff originating from areas unaffected by mining activity that does not come into contact with developed areas;

"**Nunavut Land Claims Agreement**" **(**NLCA) means the "*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada*," including its preamble and schedules, and any amendments to that agreement made pursuant to it;

"**Oily Water/Wastewater Treatment Facility**" means the engineered facilities and equipment designed and constructed to treat oily water and/or wastewater generated at the Relevant Project sites as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Operations Phase**" means the set of activities associated with mining, crushing, screening and transportation of the ore generated by the Mary River Project as described in the original application for the project, excluding the Construction, Early Revenue and decommissioning Phases;

"**Operator**" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;

"**Original Type "A" Water Licence Application**" means the application and supporting information submitted as part of the Final Environmental Impact Statement for the Project and on which Licence 2AM-MRY1325 is based;

"**Polishing Waste Stabilization Pond (PWSP)**" means the engineered structures designed and constructed for storing and/or carrying out additional treatment of Sewage effluent as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Potable Water Supply Facilities**" means the engineered facilities designed and constructed for the treatment and supply of fresh Water for domestic purposes at the Milne Port Site, the Mine Site, Steensby Port Site and the Railway camp as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Progressive Reclamation**" means actions that can be taken during mining operations before permanent closure, to take advantage of cost and operating efficiencies by using the resources

available from mine operations to reduce the overall reclamation costs incurred as described in the *Mine Site Reclamation Guidelines for the Northwest Territories* (INAC, 2007). It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals;

"**Project**" means the Mary River Project as outlined in the Final Environmental Impact Statement (FEIS) and supplemental information submitted to the Board by Baffin Land Iron Mines Corporation (BIMC) for the Mary River Project. The FEIS included a Water Licence Application and supporting technical documents for an open-pit mine on northern Baffin Island;

"**Quality Assurance/Quality Control (QA/QC)**" Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement for the three principle components of quality: precision, accuracy and reliability;

"**Quarry or Quarries**" means the areas of surface excavation for extracting rock material for use as construction materials in the development of infrastructure and facilities for the Project as outlined in the Plan entitled *Borrow Pit and Quarry Management Plan* (BAF-PH1-830-P16-0004, Rev 0), March 20, 2014;

"**Quarterly**" means, in the context of monitoring frequency, one sampling event occurring every three months with a minimum of ninety days between sampling events;

"**Railway**" means the locomotive system, including the approximately 150 km track and other infrastructure, proposed for hauling mostly iron ore from the Mine site to the Steensby Port for shipment to markets abroad;

"**Receiving Environment**" means both the aquatic and terrestrial environments that receive any discharge resulting from the Project;

"**Reclamation**" Mean the process of returning a disturbed site to its natural state or one for other productive uses that prevents or minimizes any adverse effects on the environment or threats to human health and safety as described in the *Mine Site Reclamation Guidelines for the Northwest Territories* (INAC, 2007;

"**Recognized Closed Mine**" means a recognized closed mine as defined by section (1) of the *Metal Mining Effluent Regulations* SOR/2002-222, 6th June, 2002;

"**Regulations**" means the *Nunavut Waters Regulations sor 2013/669 18th April, 2013*;

"**Seepage**" means any water that drains through or escapes from any site structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged through open pits, runoff from waste rock and ore stockpile areas, quarries, Landfill, Landfarm and other facilities;

"**Sewage**" means all toilet wastes and greywater;

"**Sewage Treatment Facilities**" means the Rotary Biological Contactor (RBC) type sewage treatment plant and infrastructure including the polishing waste stabilization ponds situated at the Milne Port Site, the Mine Site and the Steensby Port Site, as described in the Water Licence Application document entitled *Fresh Water Supply, Sewage and Wastewater Management Plan (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;*

"**Short Term Maximum**" means the maximum concentration of all samples collected over a 24 - hour period or less, taken from the identical sampling location;

"**Sludge**" means biosolids or residual solids generated from the treatment of Sewage generated by the Project;

"**Steensby Port Bulk Fuel Storage Facility**" means the permanent fuel storage tanks, containment area and appurtenance designed and constructed for the purpose of offloading, storing and distribution of fuel at the Steensby Port Site as described in the Application documents received by the Board on February 17, 2012;

"**Steensby Port Landfarm Facility**" means the engineered structure or facility and appurtenance designed and constructed at the Steensby Port Site for the storage and biological treatment of hydrocarbon impacted soil and water as described in the Plan entitled *Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

Steensby Port Landfill Facility" means the engineered structure or facility and appurtenance designed and constructed at the Steensby Port Site for the storage and treatment of non- hazardous, inert Waste as described in the Plan entitled *Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

"**Steensby Port Oily Water/Wastewater Treatment Facility**" means the engineered facilities and associated equipment designed and constructed to treat oily and/or wastewater generated at the Steensby Port Site as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Steensby Port Potable Water Treatment Facility**" means the packaged media-filtration system and associated equipment designed and installed or constructed to treat water for domestic purposes as described in the Plan entitled ***"****Baffinland Iron Mines Corporation Mary River Project Attachment 5: Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"Steensby Port Sewage Treatment Facility" means the Rotating Biological Contactor type treatment Plant, all polishing waste stabilizations ponds and other relevant equipment designed and installed to treat Sewage generated by the camp facilities at Steensby Port as described in the Plan entitled *Fresh Water Supply, Sewage and Wastewater Management Plan* (BAF-PH1-830-P16-0010, Rev 3), March 19, 2015;

"**Sump**" means an excavation in impermeable soil for the purpose of catching or storing water or waste;

"**Traditional Knowledge**" means the practical knowledge that has been gathered through the experience of living in close contact with nature and has been passed along or communicated orally, and handed down from generation to generation;

"**Use**" means use as defined in section 4 of the Act;

"**Waste**" means waste as defined in section 4 of the Act;

"Waste Management Facilities" means all facilities designated for the disposal of waste including: temporary and permanent storage and sorting areas, Sewage Treatment Plant, Landfills, Landfarms, waste rock, collection ponds and others as described in the Plan entitled "*Waste Management Plan* (BAF-PH1-830-P16-0028, Rev 3), March 20, 2015;

"**Waste Rock**" means all unprocessed rock materials that are or were produced as a result of mining operations and have no current economic value;

"**Waste Water**" means the water generated by site activities or originates on-site that requires treatment or any other water management activity;

"**Water**" means water as defined in section 4 of the Act;

"**Water Crossings**" means engineered structures, such as bridges, causeway, etc., designed and constructed for the purposes of traversing water ways without significantly impeding the flow of Water as described in the Application documents received February 17, 2012;

"**Weekly**" means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events;

Schedule B General Conditions

The Annual Report referred to in Part B, Item 4 shall include:

1. The Licensee shall file with the Board no later than the 31st of March of the year following the calendar year being reported, an Annual Report on the appurtenant undertaking which shall contain the following information:

   a. **WATER**

      i. the monthly and annual volumes, in cubic metres, of all fresh Water withdrawn for domestic, industrial purposes and for dust suppression associated with the Early Revenue Phase from each source in, on, or flowing through Inuit-owned land in accordance with Part E, Items 3, 4, and 25 of the Licence;

      ii. the monthly and annual volumes, in cubic metres, of all fresh Water obtained for domestic, industrial purposes and for dust suppression associated with the Early Revenue Phase, from each source in, on, or flowing through Crown Lands in accordance with Part E, Items 3, 4, and 25 of the Licence;

      iii. the combined monthly and annual volumes in cubic metres of all fresh Water withdrawn for domestic, industrial purposes and for dust suppression associated with the Early Revenue Phase, from sources in, on, or flowing through both Inuit-Owned Land and Crown Lands;

      iv. the monthly and annual volumes of reclaimed or recycled Water used and the purposes for which it is used;

   b. **WASTE**

      i. the monthly and annual volume in cubic meters of treated Sewage Effluent discharged from each Sewage Treatment Facility including each Polishing Waste Stabilization Pond;

      ii. the monthly and annual volume in cubic meters of treated wastewater discharged from each Oily Water/Wastewater Treatment Facility;

      iii. monthly and annual quantities of all Effluent discharged from each Surface Water Management (SWM) Pond;

      iv. the monthly and annual volumes in cubic metres of Sludge removed from each Sewage Treatment Facility and disposed of at each Landfill Facility or any approved alternative disposal facility;

v. the monthly and annual volume in cubic metres of Hazardous Waste generated and transported from the Project sites to Licensed facility outside of Nunavut for treatment;

vi. the monthly and annual volume in cubic metres of any Wastes backhauled to communities in Nunavut for treatment;

vii. the monthly and annual volume in cubic metres of Waste deposited at each Landfill Facility;

viii. monthly and annual volume in cubic metres of hydrocarbon impacted soil and water deposited at each Landfarm Facility;

ix. the monthly and annual volume in cubic metres of Sewage transported for treatment from the Railway camps to the Mine Site and Steensby Port Site Sewage Treatment Facilities;

x. the monthly and annual quantities of waste rock generated and used or disposed of;

xi. summary of quantities and analysis of seepage and runoff monitoring from the Landfill Facilities, Landfarm Facilities, and any other relevant facilities including ponds embankment dam;

xii. a summary report of solid waste disposal activities including monthly and annual quantities in cubic metres of Waste generated and location of disposal;

xiii. the monthly and annual volume in cubic metres of treated Effluent discharged into the marine environment from the Milne Port Ore Stockpile Sedimentation Pond.

c. **SPILLS**

i. a list and description of all unauthorized Discharges including volumes of spills, report line identification numbers, and summaries of follow-up action taken;

ii. a list of unauthorized discharges and a summary of follow-up action(s) taken;

iii. a summary of any updates or revisions to the Spill Contingency Plan;

d. **MODIFICATIONS**

i. a summary of modifications and/or major maintenance work carried out on all water and waste related structures and facilities;

e. **MONITORING**

i. the results of monitoring under the AEMP framework and other monitoring requirements and/or any other monitoring program, regime or plan authorized by the Board in writing;

ii. results of thermal monitoring and/or research carried out in conjunction with the Waste Rock Management Plan and disposal of potentially acid generating and metal leaching materials, permafrost integrity along the railway alignment and other project sites;

iii. tabular summaries of the results and interpretation of all data generated under the Monitoring Program in Part I and Schedule I

f. **CLOSURE**

i. a summary of any progressive closure and reclamation work undertaken including photographic records of site conditions before and after completion of operations, and an outline of any work anticipated for the next year, including any changes to implementation and scheduling;

ii. an updated estimate of the current restoration liability required under Part C, Item 1(b), based upon the results of progressive restoration, restoration research, project development monitoring, and any changes or modifications to the project;

g. **PLANS/ REPORTS/ STUDIES**

i. a summary of any studies requested by the Board that relate to Waste disposal, Water use or Reclamation, and a brief description of any future studies planned

ii. where applicable, revisions provided as Addendums with an indication of where changes have been made for Plans, Reports, and Manuals.

iii. an executive summary in English, Inuktitut, and French of all plans, reports, or studies conducted under this Licence;

iv. a summary, including photographic records before, during and after construction activities, of any modifications and/or major maintenance work carried out on facilities and Infrastructure designed to contain, withhold, divert or retain Water or Wastes, and an outline of any work anticipated for the next year;

v. a summary of the results of any geochemical analyses conducted on materials used to construct facilities and infrastructure under Part D, Item 13;

vi. a detailed discussion on the performance, installation, and evaluation, including the use of photographic records, of the primary and secondary containment structure used in fuel storage to safeguard impacts to freshwaters;

vii. the results of chemical analyses conducted on residue generated from each incinerator system prior to disposing of in any landfill;

viii. a brief description of follow-up action(s) taken to address concerns presented within any inspection and compliance reports prepared by the Inspector;

ix. an update, where required under Part B, Item, 17, in the form of an addendum or revision to the Plans approved under the relevant sections of this Licence;

x. monthly and annual quantities of aggregates excavated and used from Quarries and Borrow Pits associated with the Licence;

xi. the results of any further acid/base accounting conducted on potential acid generating and non-potential acid generated waste rock (PAG and NPAG);

xii. a summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;

xiii. all monitoring data with respect to geochemical analyses conducted on material used to construct roads, quarries, and other infrastructure;

h. **GENERAL**

i. a summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector;

ii. a summary of public consultation and participation with local organizations and the residents of the nearby communities, including a schedule of upcoming community events and information sessions;

iii. monthly and annual volume of iron ore generated by the project; and

i. **OTHER**

i. any other details on Water use or Waste Disposal requested by the Board by the 1st of November of the year being reported.

Schedule C Conditions Applying to Security

The Annual Security Review (ASR) referred to in Part C shall be conducted as follows:

Timing, Evidence and Process for ASR

1. Unless otherwise directed by the Board, the ASR shall be conducted annually on the first Thursday of December, in the form of a teleconference meeting, with representatives from the Licensee, the Minister, the Qikiqtani Inuit Association and the Nunavut Water Board. The ASR may be conducted in the form of an in person meeting if the Board considers it necessary, or if the Board grants the special request of the Licensee, the Minister or the Qikiqtani Inuit Association, for an in person meeting.

2. Unless otherwise directed by the Board, on the first Thursday of November, the Licensee, the Minister and/or the Qikiqtani Inuit Association shall file with the Board any information they intend to rely upon for the ASR, including but not limited to:

    a. an updated Preliminary, Interim or Final Mine Closure and Reclamation Plan;
    b. the total financial security amount calculated for the highest level of reclamation liability for land and water combined for the upcoming year as calculated in accordance with Item 6 of this Schedule;
    c. the total of any equivalent financial security being held by the Minister and/or the
    d. Qikiqtani Inuit Association outside the Licence;
    e. information that supports the increase, maintenance or reduction of the total financial security under the Licence; and
    f. any other information necessary to support the request of the parties for the Board to issue further directions under Part C with respect to the amount of security to be furnished and maintained under the Licence.

3. Unless otherwise directed by the Board, within forty-five (45) days following the ASR, the Board will advise the Licensee, the Minister and the Qikiqtani Inuit Association of the total financial security for the upcoming year to be filed as required under Part C, Item 1 of the Licence.

4. Unless otherwise directed by the Board, within thirty (30) days from the date the Board releases its determination of the total financial security amount required for the upcoming year, as set out in Item 3 above, the Licensee is required to furnish and maintain security with the Minister in the amount and form that is satisfactory to the Minister or that is in accordance with the applicable regulations.

5. In any event, if the Licensee fails to file the total financial security amount required for the upcoming year as determined by the Board under the Licence on or before March 1, the Licensee is not authorized to proceed with any planned activities that could increase the total financial security amount required to be held under the Licence until they have filed the total financial security amount required to be held under Part C for the upcoming year.

Total Financial Security Calculation

6. The basis for calculating the total financial security required for final reclamation under the ASR is as follows:

    a. the total financial security amount must be calculated on the basis of a holistic approach to reclamation that includes outstanding reclamation liability for land and water combined;
    b. the total financial security amount must include consideration of cumulative and legacy liabilities; and
    c. the total financial security amount must be calculated at the beginning of the work year and must be sufficient to meet the highest reclamation liability in the upcoming year.

Evidence to Reduce Total Financial Security under the Licence

7. Upon receiving written evidence from the Licensee, the Minister and/or the Qikiqtani Inuit Association that adequate security, equivalent to that held under Part C of the Licence is secured by another mechanism acceptable to the Licensee, the Minister and the Qikiqtani Inuit Association, including, but not limited to the parties entering into a security management agreement or similar instrument, the Board may reduce the total financial security amount required to be held under the Licence.

8. In assessing the extent of any reduction to the total financial security amount held under the Licence as set out in Item 6 of this Schedule, the Board must ensure that when taken together, the equivalent security and the total financial security amount held under Part C of the Licence are sufficient to meet the total financial security amount for reclamation as calculated under Item 6 of this Schedule.

9. Further, in assessing the extent of any reduction to the total financial security amount held under the Licence, the Board may consider a split between the portion of financial security required for reclamation on Inuit Owned Lands and the portion of financial security required for reclamation on Crown lands and may direct that the reductions in the total financial security amount be discounted from the financial security amount applicable to only Inuit Owned Lands or Crown lands as may be appropriate.

Schedule D Conditions Applying to Construction

1. The Construction Monitoring Report referred to in Part D, Item 17 shall include:

    a. description of all infrastructure and facilities designed and constructed to contain, withhold, divert or retain Water and/or Waste;

    b. a summary of construction activities including photographic records before, during and after construction of the facilities and infrastructure designed to contain, withhold, divert or retain Water and/or Waste;

    c. as-built drawings and design for facilities and infrastructure, in Item 1(a) of this schedule, designed and constructed to contain, withhold, divert or retain Water and/or Waste;

    d. documentation of field decisions that deviate from the original plans and any data used to support or developed facilities and infrastructure to withhold, divert or retain Water and/or Waste;

    e. a comparison of measured versus predicted performance of infrastructure and facilities;

    f. any blast vibration monitoring and control for quarrying activity carried out in close proximity to fish bearing waters;

    g. monitoring conducted for sediment and explosives residue release from construction areas;

    h. monitoring undertaken in accordance with Part D of the Licence during the Construction Phase of the Project;

    i. details confirming that the requirements of the CCME guidance document entitled "Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)" have been met by the Licensee;

    j. data collected from instrumentation used to monitor earthworks and the interpretation of that data;

    k. a discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk during construction;

    l. an overview of any method including frequency used to monitor deformations, seepage and geothermal responses;

m. a summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams;

n. a summary of adaptive management principles and practices applied during the relevant phases of the Project and their overall effectiveness;

Schedule E Conditions Applying to Water Use and Management

There is no Schedule for PART E – Conditions Applying to Water Use and Management

Schedule F Conditions Applying to Waste Disposal and Management

There is no Schedule for PART F – Conditions Applying to Waste Disposal and Management

Schedule G. Conditions Applying to Modifications

There is no Schedule for PART G – Conditions Applying to Modifications

Schedule H Conditions Applying to Emergency Response and Contingency Planning

There is no Schedule for PART H – Conditions Applying to Emergency Response and Contingency Planning

Schedule I Conditions Applying to General and Aquatics Effects Monitoring

Table 12: Monitoring Group Parameters

Group	Parameters
1	Water withdrawal volume in cubic metres, or Water Discharge volume in cubic metres
2	Biological Oxygen Demand (BOD_5), pH, Total Suspended Solids (TSS), Faecal Coliform, Oil and Grease, Ammonia-Nitrogen, Total Kjeldahl Nitrogen(TKN), Total Phosphorous
3	a. Acute lethality to Rainbow Trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and b. Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14)
4	pH, Total Suspended Solids (TSS), Ammonia, Total Phosphorous Benzene, Ethylbenzene, Toluene, Oil and Grease, **Total metals:** Arsenic, Copper, Lead, Nickel, Zinc
5	pH, Total Suspended Solids (TSS) Benzene, Ethylbenzene, Toluene, Total Lead, Oil and Grease, Total Petroleum Hydrocarbons (TPH)
6	pH, Alkalinity, Conductivity, Total Suspended Solids (TSS), Total Dissolved Solids (TDS) Oil and Grease, Phenols Total Petroleum Hydrocarbons Total Organic Carbon (TOC), Dissolved Organic Carbon (DOC) Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn): and Trace Arsenic and Mercury

7	pH, total suspended solids, total dissolved solids, alkalinity, hardness, turbidity, total Kjeldahl nitrogen, ammonia nitrogen, nitrate nitrogen, dissolved organic carbon, total organic carbon, total phosphorus, sulphate, fluoride, chloride. Total a**nd Dissolved Metals**: aluminum, arsenic, cadmium, calcium, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, sodium, thallium, uranium, zinc, **Field parameters:** pH, temperature, turbidity, specific conductance
8	Ammonia (total NH_3-N), Nitrate (total NO_3-N), pH, Conductivity Total Suspended Solids, Oil and Grease

Table 13: Monitoring Program (Milne Port Site)

Station	Description	Project Phases	Monitoring Parameters	Frequency
MP-MRY-2	Freshwater Intake at Phillips Creek (Summer)	Construction Operations Closure	Group 1	Record Daily Report Monthly
MP-MRY-3	Freshwater Intake from Km 32 Lake (Winter)	Construction Operations Closure	Group 1	Record Daily Report Monthly
MP-01	Milne Port Sewage Treatment Facilities (discharge into ditch prior to ocean)	Construction Operations	Groups 1, 2	Monthly
			Group 3	Annually
MP-01a	Milne Port Polishing Waste Stabilization Pond (PWSP)	Construction Operations	Groups 1, 2	Once prior to discharge and Monthly
			Group 3	Annually
MP-02	Milne Port Maintenance Shop Oily water/WWTF	Construction Operations	Groups 1 and 4	Monthly
MP-MRY-04	Milne Exploration Phase Sewage Treatment Facilities (to become	Construction Operations Closure	Groups 1, 2	Monthly
			Group 3	Annually
MP-MRY-04a	Milne Exploration Phase Sewage PWSP (to become inactive after transition period)	Construction Operations Closure	Groups 1, 2	Once prior to discharge and Monthly
			Group 3	Annually

MP-03	Milne Port Bulk Fuel Storage Facility Stormwater	Construction Operations	Groups 1 and 4 5	Daily Flow Monthly
MP-04	Milne Port Landfarm Facility Storm water	Construction Operations Closure	Group 1 Group 5 Plus TSS	Daily Flow Monthly
MP-MRY-7	Milne Exploration Phase Bladder Fuel Storage Facility Storm water (to become inactive after transition period)	Construction Operations Closure	Groups 1 and 5	Daily Flow Monthly
MP-MRY-12	Bulk Sample Stockpile Area Seepage	Construction Operations Closure	Groups 1 and 7	Monthly
			Group 3	Annually
MP-C-A MP-C-B MP-C-C MP-C-D MP-C-E MP-C-F MP-C-G MP-C-H	Surface discharge downstream of construction area at Milne Port	Construction	Groups 1 and 8	during periods of flow and following significant precipitation events, on a monthly basis
MP-05 (New)	Milne Port Ore Stockpile Sedimentation Pond (East)	Construction Operation ERP Closure Operation	Groups 1 and 7	Monthly during summer
			Group 3	Annually
MP-06 (New)	Milne Port Ore Stockpile Settling Pond (West)	Construction ERP Operations Closure	Groups 1 and 7	Monthly during summer
			Group 3	Annually
MS-C-G (New) MS-C-H (New)	Surface discharge downstream of construction area at Milne Site	Construction	Group 1 and 8	During period of flow and following precipitation events on a monthly basis

Table 14: Monitoring Program: Mary River Mine Site

Station	Description	Phases	Monitoring Parameters	Frequency
MS-MRY-1	Freshwater Intake from Camp Lake	Construction Operations Closure	Group 1	Record Daily
MS-01	Mine Site Sewage Treatment Facilities	Construction Operations	Groups 1 and 2	Monthly
			Group 3	Annually
MS-01a	Mine Site Polishing/Waste Stabilization Pond (PWSP)	Construction Operations	Groups 1 and 2	Once prior to discharge and Monthly
			Group 3	Annually
MS-02	Mine Site Maintenance Shop Oily Water WWTF	Construction Operations	Groups 1 and 4	Monthly
MS-MRY-04	Exploration Camp Sewage Treatment Facility	Construction Operations Closure	Groups 1, and 2	Monthly
			Group 3	Annually
MS-MRY-04a	Exploration Camp Polishing Waste Stabilization Ponds (PWSP)	Construction Operations	Groups 1 and 2	Once prior to discharge and Monthly
			Group 3	Annually
MS-03	Mine Site Bulk Fuel Storage Facility Stormwater	Construction Operations	Groups 1 and 5	Daily Flow Monthly
MS-04	Mine Site Fuel Unloading Station Stormwater	Construction Operations	Groups 1 and 5	Daily Flow Monthly
MS-05	Mine Site Landfarm Facility	Construction Operations	Groups 1 and 5 Plus TSS	Daily Flow Monthly
MS-MRY-6	Exploration Camp Bulk Fuel Storage Facility	Construction Operations	Groups 1 and 5	Daily Flow Monthly
MS-06+	Ore Stockpile Pond Stormwater	Operations Closure	Groups 1 and 7	Monthly during summer
			Group 3	Annually

MS-07	Run of Mine Ore Stockpile Pond Stormwater	Operations Closure	Groups 1 and 7	Monthly during summer
			Group 3	Annually
MS-08	Waste Rock Stockpile West pond	Operations Closure	Groups 1 and 7	Monthly during
			Group 3	Annually
MS-09	Waste Rock Stockpile East pond	Operations Closure	Groups 1 and 7	Monthly during summer
			Group 3	Annually
MS-MRY-09	Bulk Sample Open Pit – Surface water drainage (to become	Construction Operations	Groups 1 and 7	Monthly (during summer)
			Group 3	Annually
MS-MRY-10	Bulk Sample Weathered Ore Stockpile – Downstream surface water drainage (to become inactive in future)	Construction Operations Closure	Groups 1 and 7	Monthly during summer
			Group 3	Annually
MS-MRY-11	Bulk Sample Processing Stockpile Area – Downstream surface water	Construction Operations Closure	Groups 1 and 7	Monthly during summer
			Group 3	Annually
MS-MRY-13a & MS-MRY-13b	Non-Hazardous Waste Landfill – Downstream surface water drainage	Construction Operations Closure	Groups 1 and 6	Daily Monthly
MS-C-A			Groups 1 and 8	during periods of flow and following
MS-C-B				
MS-C-C	MS-C-A	Surface discharge downstream		significant precipitation events, on a monthly basis
MS-C-D				
MS-C-E				
MS-C-F				

Table 15: Monitoring Program (Steensby Inlet or Port Site)

Station	Description	Phase	Monitoring Parameters	Frequency
SP-08	Freshwater Intake at ST 347 Lake (permanent camp	Construction Operations Closures	Group 1	Record Daily Report Monthly
SP-09	Freshwater Intake at 3 Km lake	Construction Operations Closure	Group 1	Record Daily Report Monthly
SP-01	Steensby Port Sewage Treatment Facilities	Construction Operations	Groups 1 and 2	Monthly
			Group 3	Annually
SP-01a	Steensby Polishing/Waste Stabilization Pond (PWSP)	Construction Operations	Groups 1 and 2	Once prior to discharge and Monthly thereafter
			Group 3	Annually
SP-02	Steensby Maintenance	Construction Operations	Groups 1 and 4	Monthly
SP-03	Floating Construction	Construction	Groups 1, 2, and 3	
SP-04	Steensby Bulk Fuel Storage Facility Stormwater	Construction Operations	Groups 1 and 5	Daily Flow Monthly
SP-05	Steensby Marine Fuel Storage Facility Stormwater	Construction Operations	Groups 1 and 5	Daily Flow Monthly
SP-06	Steensby Landfarm Facility Stormwater	Operations	Groups 1 and 5 Plus TSS	Daily Monthly
SP-07	Steensby Ore Stockpile Stormwater	Operations	Groups 1 and 7	Monthly during summer
			Group 3	Annually
SP-08	Steensby Landfill Seepage	Construction Operations Closure	Groups 1and 6	Monthly / observed flow
Railway Corridor				

TBD Ravn River Camp	Fresh Water Intake Ravn Camp Lake	Construction	Group 1	Record Daily Report Monthly
TBD Mid-Rail Camp	Freshwater Intake at Nivek Lake (summer) Ravn Camp Lake (winter)	Construction	Group 1	Record Daily Report Monthly
TBD Cockburn North	Freshwater Intake at Cockburn Lake	Construction	Group 1	Record Daily Report Monthly
TBD Cockburn South	Freshwater Intake at Cockburn Lake	Construction	Group 1	Record Daily Report Monthly

Schedule J. Conditions Applying to Abandonment, Reclamation and Closure

The annual work plan and updated estimate of anticipated mine closure and reclamation process referred to in Part J shall be conducted as follows:

1. Unless otherwise directed by the Board, on an annual basis on or before the 1st of November, the Licensee shall submit to the Board an annual work plan and updated estimate of the anticipated mine closure and reclamation costs for the upcoming year.

2. The anticipated mine closure and reclamation costs will include the highest reclamation liability in the upcoming year and the liability will be assessed separately for:

    a. the proportion of the Project activities taking place on Inuit Owned Lands; and
    b. the proportion of the Project activities taking place on Crown lands.

3. As part of the Annual Security Review conducted under Schedule C, the Licensee, the Minister and the Qikiqtani Inuit Association will review and provide comment to the Board on the annual work plan and updated estimate of the anticipated mine closure and reclamation costs for the upcoming year.

4. If the parties are unable to reach agreement regarding the updated estimate of the anticipated mine closure and reclamation costs for the upcoming year, the Board, as part of the Annual Security Review determination under Schedule C, shall provide direction regarding the acceptable estimate of anticipate mine closure and reclamation costs for the upcoming year.