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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

File No.: **2BB-MRY1114**

April 8, 2011

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Email: Jim.Millard@Baffinland.com

RE: NWB Renewal of Licence No. 2BB-MRY0710, as Licence No. 2BB-MRY1114

Dear Mr. Millard:

Please find attached Licence No. **2BB-MRY1114** issued to Baffinland Iron Mines Corporation by the Nunavut Water Board (NWB) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Land Claims Agreement or NLCA)*. The terms and conditions of the attached Licence related to water use and waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then water use and waste disposal must cease, or the Licensee may be in contravention of the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence. The NWB recommends that an application for the renewal of this Licence be filed at least three months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

The NWB would like to acknowledge the detailed responses and submissions provided by the Licensee, during and after the public review period, in relation to concerns expressed and comments made by the intervening parties: the Government of Nunavut-Culture, Elders Language and Youth (GN-CLEY), Indian and Northern Affairs Canada (INAC) and the Qikiqtani Inuit Association (QIA). The comments from interveners are attached for information purposes.¹

Sincerely,



Thomas Kabloona
Nunavut Water Board
Chair

TK/sj/pb

Enclosure: Licence No. **2BB-MRY1114**
Comments: INAC, QIA, GN-CLEY

Cc: Qikiqtani Distribution List

¹ Indian and Northern Affairs Canada (INAC), January 21, 2011; Government of Nunavut – Department of Culture, Language, Elders and Youth (GN-CLEY), January 21, 2011; and Qikiqtani Inuit Association (QIA), March 7, 2011.

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DECISION

LICENCE NUMBER: 2BB-MRY1114

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated January 6, 2011 for the renewal of Water Licence No. 2BB-MRY0710 made by:

BAFFINLAND IRON MINES CORPORATION

to allow for the use of water and disposal of waste during camp operations and activities related to Mining and Milling that include exploration, drilling on land and on ice at the Mary River Project located within the Qikiqtani Region, Nunavut, generally located at the geographical coordinates as follows:

Latitude: 69° 49' 00" N to 72° 05' 00" N (Project Extents)

~~Longitude: 77° 45' 00" N to 81° 00' 00" N (Project Extents)~~

Longitude: 77° 45' 00" W to 81° 00' 00" W (Project Extents)

Latitude: 71° 19' 30" N Longitude: 79° 22' 40" W (Mary River Camp)

Latitude: 70° 17' 40" N Longitude: 78° 29' 15" W (Steensby Inlet Camp)

Latitude: 71° 53' 00" N Longitude: 80° 54' 15" W (Milne Inlet Camp)

Latitude: 70° 58' 20" N Longitude: 78° 22' 15" W (Mid-Rail Camp)

DECISION

After the Nunavut Planning Commission determined that the application was in conformity with the North Baffin Regional Land Use Plan² and the Nunavut Impact Review Board indicated the application was exempt from the requirement for screening as described within Section 12.4.3³, the application was processed by the NWB in accordance with Article 12 of the *Nunavut Land Claim Agreement (NLCA)*. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSTRA or Act)* and Article 13 of the *NLCA*, public notice of the application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *NLCA* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

Licence No. 2BB-MRY0710 be renewed as Licence No. 2BB-MRY1114 subject to the terms and conditions contained therein. (Motion #: 2011-03-03)

² NPC Conformity Determination, February 8, 2008.

³ NIRB Screening Determination, February 23, 2011; NIRB Screening Decision, May 7, 2007 (NIRB File No. 07EN012).

Signed this 5th day of April 2011 at Gjoa Haven, NU.



Thomas Kabloona
Nunavut Water Board
Chair

TK/sj/pb

INTRODUCTION

The Mary River Project, which is classified as a Mining and Milling undertaking, is located approximately 160 km south of Pond Inlet in the Qikiqtani Region of Nunavut. Since its inception in 2004, the project has been operated by Baffinland Iron Mines Corporation (BIMC). The primary focus of the project has been on exploration activities pertaining to iron ore deposits.

BIMC currently holds a number of Federal Mineral Leases, of which three were established in the 1960s prior to the implementation of the Nunavut Land Claims Agreement. The Land surrounding the Federal Leases is categorized as Inuit Owned Lands (IOL). BIMC has been granted a Land Use Licence from the Qikiqtani Inuit Association for the use of IOL. There are five known deposits (1, 2, 3, 3A, and 4). Deposit number 1, is estimated at 117 million tonnes of high grade iron ore. Estimates for the other deposit have not been established yet.

PROCEDURAL HISTORY

The Nunavut Water Board (Board or NWB) issued water licence NWB2MRY0406 on June 11, 2004. Licence NWB2MRY0406 underwent one amendment on August 4, 2005 and it subsequently expired on June 30, 2006. Following the expiry of the original licence, the Board issued Licence 2BE-MRY0708 on February 20, 2007 with the expiration date of December 31, 2008. Amendment No. 1 under Licence 2BE-MRY0708 was issued on July 16, 2007 to allow for a Bulk Sampling Operation. A second amendment was later issued on February 13, 2008 under No.2BB-MRY0710, to allow for additional camps and the extension of the Licence's term to December 31, 2010.

Required Plans and Reports

Various plans and reports have required submission by the Licensee over the duration of the previous licence and subsequent amendments that have taken place since 2004 and most recently the renewal in 2007.

Under the previous Licence and/or amendments, Part D, Item 16, the Board had imposed the requirement for a Geotechnical Engineer to inspect the site during the summer of 2008 and provide a report with recommendations to the NWB. Along with the Engineer's report, there is to be a cover letter from the Licensee outlining a plan, if necessary, to address the Geotechnical Engineer's recommendations. The Licensee has provided an annual geotechnical inspection report, which included a plan outlining steps to address the Engineer's recommendations for each of the following years: 2008, 2009 and 2010.

The document entitled "Baffinland Iron Mines Corporation, Mary River Project, Bulk Sampling Program Landfill Design and Operations", dated November 13, 2007 was received by the NWB on November 23, 2007 and distributed for technical review and/or comments on January 14, 2008. Comments were received through submission from the Qikiqtani Inuit Association on February 13, 2008, Environment Canada on February 4, 2008 and from Indian and Northern Affairs Canada on June 23, 2008. The Licensee was issued an approval letter on September 10,

2008 along with a request to review the comments received and provide a revised Plan. It was later noted that BIMC had submitted a revised document on March 31, 2008 which contained an Operations and Maintenance section, previously omitted from the earlier version. On January 21, 2009 the NWB acknowledged receipt of the addendum and provided a letter of acceptance, requesting as-built drawings and construction report within ninety (90) days of completion.

The Licensee submitted to the Board, a Site Water Management Plan dated October 25, 2007, which was then distributed for a thirty (30) day public comment period on November 5, 2007. Comments were received from the QIA and INAC. Revised Plans dated March 31, 2008 and March 31, 2009 respectively, were submitted to the Board. The 2009 Plans were distributed for review and comments were received from Government of Nunavut-Department of Environment (GN-DOE).

On September 8, 2007, BIMC submitted to the NWB, a Waste Water Management Plan for the Mary River Project. On the same date, the NWB acknowledged and distributed the Plan for a thirty (30) day comment and/or review period. Comments were received from INAC. BIMC was informed of INAC's comments, and provided a specific response on December 9, 2007 to the concerns and/or comments expressed by INAC. On April 20 2009, the Licensee submitted a revised Plan, which the Board distributed on June 16, 2009 for a thirty (30) day comment period. Comments were received from GN-DOE and EC. On July 24, 2009, the Licensee provided a written response to the reviewers' comments on the Plan.

On June 9, 2009 the Licensee provided the Board with an update of proposed measures to manage the Polishing/Waste Stabilization Ponds at the Milne Inlet and Mary River Camps. The NWB distributed the update on June 25, 2009. On April 20, 2009, the Licensee submitted a revised Plan, which the Board distributed on June 16, 2009, for a thirty (30) day comment period. Comments were received from GN-DOE and EC. On July 24, 2009, the Licensee provided a written response to the reviewers' comments with respect to the Plan. The NWB reviewed the Plan and taking into consideration the comments provided by interveners, the NWB approved the Plan on August 10, 2009 under Motion No.2009-09-L05.

Under condition Part G, Item 3 of the previous licence, the Licensee was required to submit a report to the Board confirming that the requirements of the CCME guidance documents have been met by the Licensee. This report was submitted on April 13, 2007 by the Licensee, "stamped" by an Engineer. As the report was completed prior to the bulk fuel storage being constructed, the report did not reflect the current method of storage at the Mary River Project and was not approved. The Bulk Fuel Storage Facility, with a total storage volume of 8,403,440 litres (74 bladders of 113,560 litres/bladder) located at the Milne Inlet site was commissioned in 2007, while the Bulk Fuel Storage Facility, with a total storage volume of 1,816,960 Litres (16 Bladders of 113,560 litres/bladder) at the Mary River site, was commissioned in 2008.

On June 13, 2006, the NWB received the submission of a Bulk Sampling Abandonment and Restoration Plan for the Mary River Project. The plan was distributed for a thirty (30) day comment period on August 8, 2007, and comments were received from Environment Canada.

On February 14, 2008, the NWB approved the Plan under Motion 2007-19-15. A revised A&R Plan dated March 26, 2009 was submitted to the NWB and distributed for information purposes on June 18, 2009. No comments were received.

On November 25, 2007 BIMC submitted to the Nunavut Water Board a Quality Assurance/Quality Control (QA/QC) Plan. The plan was distributed for a thirty-day comment period on November 7, 2007. A Submission was received from QIA only. On November 27, 2007, the NWB received comments on the Plan from Angelique Ruzindana, a Quality Assurance (QA) Officer at Taiga Environmental Laboratory. The Quality Assurance Officer's comments were followed up by an approval letter for the Plan on December 10, 2007.

On October 28, 2010, the Licensee submitted to the Board, a Comprehensive Environmental Monitoring Plan dated, October 4, 2007, required under the terms and conditions under the previous Licence. The Plan was distributed on October 28, 2010 for a thirty (30) day comment period. On or before the deadline for comments, submissions were received from GN-CLEY and EC. This plan was very comprehensive and provided information well beyond the scope of the Licence and expected monitoring requirements.

A revised version of the QA/QC Plan, dated March 31, 2008, which is the latest version that the NWB has received, and the Analyst approval letter for the Plan dated May 25, 2009 remain valid under Part I, Item 11 in this Licence.

Additional Information on Bulk Fuel Storage

Under the previous Licence, authorization was granted to the Licensee for the construction of, at Milne Inlet and Mary River camp sites, Bulk Fuel Storage Facilities consisting of earthen berms lined with petroleum-resistant geomembrane that meets ULC/ORD-C58.9-1997 specifications for underground and above ground flammable and combustible liquid storage tanks.

The Milne Inlet Bulk Fuel Storage Facility consists of 74 fuel bladders, each with a capacity of 113,560 litres. Diesel is stored in 71 Bladders and aviation fuel is stored in the remaining 3 bladders. The Mary River Bulk Fuel Storage Facility consists of 16 fuel bladders, each with a capacity of 113,560 litres. Two to four bladders are used for storing aviation fuel while the remainder is used to store diesel. In the past, the Licensee has used Milne Tote Road as an access point to transfer fuel from Milne Bulk Fuel Storage Facility to Mary River Bulk Fuel Storage Facility.

The Licensee has stated in a letter⁴ to the Board dated March 21, 2011, that it intends to replace fuel bladders at the Milne Inlet site with steel tanks by 2012 and that it would develop an action plan and provide the NWB and QIA a copy of the conceptual plan prior to replacing the fuel bladders. The Board has therefore included the requirement that the Licensee provide details of the action plan and conceptual plan at least sixty (60) days prior to the replacement of the fuel bladders.

⁴ Letter Baffinland Iron Mines Corporation to NWB in Response to Reviewers Comments, March 21, 2011.

CURRENT APPLICATION

The current application is for the renewal of type “B” Water Licence 2BB-MRY0710 (the Licence). The application is to allow the proponent to continue to carry out exploration and geotechnical drilling programs, progressive reclamation programs, activities in support of scientific and engineering studies related to the advancement of the EIS, a Bulk Sampling Program and ongoing maintenance and upgrades to existing project infrastructure, as well as other activities allowed for under the previous Licence. Current camps operated under the previous licence include:

Mary River Camp: Latitude 71° 19' 30" Longitude 79° 22' 40"
Steensby Inlet Camp: Latitude 70° 17' 40" Longitude 78° 29' 15"
Milne Inlet Camp: Latitude 71° 53' 00" Longitude 80° 54' 15"
Mid-Rail Camp: Latitude 70° 58' 20" Longitude 78° 22' 15"

On January 6, 2011, the NWB received, from Baffinland Iron Mines Corporation (Licensee or BIMC), an application for the renewal of type “B” Licence 2BB-MRY0710. The application consisted of the following documents:

- Cover letter to NPC received January 6, 2011
- Cover letter to NWB received January 6, 2011
- Water Licence Renewal Form received January 6, 2011
- Corporate information received January 6, 2011
- A&R information received January 6, 2011
- Past NIRB screening decisions received January 6, 2011
- Most recent NPC conformity review received January 6, 2011
- Plans and Figures to support application received January 6, 2011
- Inuktitut cover letter to NWB received January 11, 2011

Following receipt of the application, it was reviewed internally for administrative and technical completeness and following confirmation, the application was distributed on January 11, 2011 to interested persons requesting comments and/or review on the application by February 11, 2011⁵.

On January 17, 2011, following the distribution of the application, the NWB received a copy of a letter⁶ from INAC, addressed to the Licensee, informing BIMC of INAC’s recognition that the Licence had expired on December 31, 2010, and that no substantive site activities should be conducted until the water Licence was renewed. BIMC provided a response⁷ to INAC, with an explanation as to why the Licence had not been renewed prior to its expiry, a rationale for operating under an expired Licence and information on steps that the Company has taken to prevent future occurrences. In addition, BIMC provided a response to address the issues

⁵ NWB Public Notice of Amendment & Renewal Application, January 11, 2011.

⁶ Letter from Indian and Northern Affairs Canada (INAC) to Baffinland Iron Mines Corporation, January 17, 2011.

⁷ Baffinland Iron Mines Corporation Response to INAC Comments, January 21, 2011.

identified in INAC's letter.

On January 28, 2011 the Qikiqtani Inuit Association (QIA) submitted a request⁸ to the Board to extend the comment period deadline for the Application to March 7, 2011. This was in order to permit sufficient time for QIA's new staff to review the Application. The Board informed BIMC of QIA's request⁹ which was followed by a response from the proponent¹⁰ stating that it objected to an extension of the comment period as it could potentially delay BIMC's annual mobilization efforts. In recognition of QIA's central role in conducting their review of the application and providing the Board with their comments and the fact that the extension request was for a reasonably short period and would not unduly delay the process, on February 7, 2011, the Board approved QIA's extension request¹¹.

Submissions¹² pertaining to the review of the application were received from Government of Nunavut – Culture, Elders Language and Youth (GN-CLEY), Indian and Northern Affairs Canada (INAC) and the Qikiqtani Inuit Association (QIA).

GN-CLEY stated that it had no objections to the renewal of the application and provided information on known archaeological sites within radii ranging from 1-5 kilometres of the project area. INAC recommended that: the Board consider the remediation cost estimate that the applicant provided for water-related impacts. With respect to other concerns, issues raised included revision to the Abandonment and Restoration Plan to include procedures for assessing contaminants on site prior to temporary closure; a request that the proponent provide accurate and detailed records on consultations; and the suggestion that the term of the Licence be two to three years. The QIA provided comments pertaining to the NWB Water Licensing Process and Procedures, the status and/or the availability, on the NWB's Public Registry website, of technical documents requiring approval or acceptance by the Board under the terms and conditions of the licence, and records of public consultations.

As a final opportunity for the Company to respond to the concerns raised in the submissions, the Board invited the Licensee to review the submissions and provide a formal response to the Board. On March 21, 2011, the Licensee responded¹³ to the comments and concerns raised by the intervening parties.

In addition to the above, the Qikiqtani Inuit Association (QIA) submitted comments, which questioned whether or not the application should be considered to be an amendment or a renewal. The Board notes that under s.174 of the NWNSRTA, the NWB's processing of an application for a licence renewal is the same as for a licence amendment.¹⁴ Consequently, the

⁸ Letter from Qikiqtani Inuit Association (QIA) to the NWB request for an extension to the comment period, January 28, 2010.

⁹ Email from NWB to Baffinland Iron Mines Corporation informing of QIA's request, Jan 31, 2011.

¹⁰ Letter from Baffinland Iron Mines Corporation to NWB, Re: Response to QIA Request for Extension, January 31, 2011.

¹¹ Letter from NWB Re: NWB Board Decision on QIA's Extension Request, February 7, 2011.

¹² Submissions received from Government of Nunavut – Department of Culture, Language, Elders and Youth (GN-CLEY), January 21, 2011; Indian and Northern Affairs Canada (INAC), January 21, 2011; and Qikiqtani Inuit Association (QIA), March 7, 2011.

¹³ Letter Baffinland Iron Mines Corporation to NWB Re: Response to Reviewers Comments, March 21, 2011.

¹⁴ See s. 174 of the NWNSRTA that prescribes: (1) The regulations made under paragraph 33(1)(c) of the

Board has not found it necessary to make a decision on whether the submission is an application for amendment or a renewal, as the Board's focus in processing either form of application remains the development of appropriate licence terms and conditions based on the information submitted and comments received. The Board notes that although the renewed Licence No. 2BB-MRY1114 contains some Board-initiated amendments, the Licensee's renewal request and the proposed activities have not changed from the activities authorized in the previous Licence No. 2BB-MRY0710.

ISSUES

The following sections provide some background and context relevant to the terms and conditions included in the renewal Licence, as they relate to submissions received and/or the NWB's technical review, rationale and decision.

General

The application is for the renewal of the previous licence, 2BB-MRY0710, existing terms and conditions and a five-year term. Although no changes were requested, the Licensee had suggested through the application that, should the NWB decide, the volume of the water use authorized could be reduced to a new volume. The Licence number has been updated to reflect the date of issuance and the expiry date of the renewed Licence.

Licence Term

The current Licence, 2BB-MRY0710, expired on December 31, 2010. The Licensee has requested a five-year term in its renewal application. Two intervening parties, INAC and QIA, have recommended terms of 3-years and 1-year, respectively. The NWB has given consideration to the overall magnitude and scope of the project as well as the comments received from intervening parties, and is therefore issuing a three-year term on this Licence. The term takes into consideration the anticipated time required to complete the regulatory process for a Type "A" Water Licence, including contingencies. The Type "A" Licence is eventually expected to complement and/or supplement the Type B Licence and will include activities licensed under the renewed Licence. The Licensee is currently proceeding with an application under the Nunavut Water Board (NWB) and the Nunavut Impact Review Board's (NIRB) Detailed Coordinated Process Framework. The Type "A" licensing process is anticipated to take approximately two to three years, and as such, a three year term is considered to be appropriate. The Licensee is reminded that, in the event that it is necessary to renew the Type "B" Licence, an application for renewal **MUST** be filed at least three months prior to the Licence expiry date in order to allow the Board adequate time to complete the renewal process.

Northwest Territories Waters Act are deemed, in relation to the use of waters or the deposit of waste in Nunavut, to prescribe, as classes of applications that are exempted from the requirement of a public hearing, the classes of applications in relation to the following: (b) in the case of a Type B licence, its issuance, amendment, renewal or cancellation.

Security

In accordance with s. 76(1) of the NWNSRTA, the Board may require a licensee to furnish and maintain security with the Minister in a form determined by the Regulations or satisfactory to the Minister.¹⁵ Further, in a matter related to the posting of security, the Board may not issue a licence unless the Board is satisfied that the financial responsibility of the applicant, taking into account the applicant's past performance, is adequate for the mitigation measures and any costs associated with the closing or abandonment of the undertaking.¹⁶ BIMC provided financial statements with the application dated June 2010. The NWB has confirmed the financial responsibility of the applicant, upon review of the publically available BIMC financial statement, dated September 30, 2010.

The Regulations¹⁷ allow the Board to fix the amount of security that the Licensee or applicant is required to furnish, to an amount not exceeding the aggregate of the cost of:

- a. Abandonment of the undertaking;
- b. Restoration of the site of the undertaking; and
- c. Any ongoing measures that may remain to be taken after the abandonment of the undertaking.

The Board's Jurisdiction over Land and Water Security

Over time, the Board has extensively canvassed their jurisdiction over land and water related security in various decisions.¹⁸ As set out in the Board's *Reasons for Decision for the Doris North Gold Mine*,¹⁹ the Board has determined the NWB has the jurisdiction to require security to ensure the reclamation of both land and water-related components of undertakings governed by a water licence on the following basis:

After careful consideration, the Board accepts the submissions of both [Kitikmeot Inuit Association] and MHL on the matter of the Board's jurisdiction pursuant to section 76(1) of the NWNSRTA. In particular, in the Board's mind, the language of subsections 76(1) and 70(1)(d), as well as the wording of the section 12 of the NWT Water Regulations, including the use of the words "appurtenant undertaking" provide the Board with jurisdiction to determine the total amount of security – water and land-related - for the Project. Furthermore, while the Board is not bound by its previous

¹⁵ Subsection 76(1) of the NWNSRTA states: 76(1) The Board may require an applicant, a licensee or a prospective assignee to furnish and maintain security with the Minister in the form, of the nature, subject to such terms and conditions in an amount prescribed by, or determined in accordance with, the regulations or that is satisfactory to the Minister.

¹⁶ See subsection 57(b) of the NWNSRTA.

¹⁷ Northwest Territories Waters Regulations (SOR/93-303), June 8, 1993 and application of Regulations Order SOR/2002-253 12 July, 2002.

¹⁸ See for example Nunavut Water Board, *Reasons for Decision for 2AM-DOH0713*, September 19, 2007 and Nunavut Water Board, *Reasons for Decision for 2AM-MEA0815*, June 9, 2008.

¹⁹ The Board's *Reasons for Decision for 2AM-DOH0713* may be found on the Nunavut Water Board FTP site at http://www.nunavutwaterboard.org/en/public_registry.

decisions, the Board has reviewed and re-affirms its reasons in its 2001 Boston Renewal Decision, most importantly, the Board agrees with MHL that this decision is consistent with the Federal Court's interpretation of section 76(1) of the NWNSRTA in the Canzino decision.²⁰

Unless the Board has evidence of an agreement between the various holders of security indicating that the total outstanding reclamation liability for land and water has been adequately addressed and will be executed in a manner that ensures land and water related reclamation will be approached holistically, the Board will not split security into reclamation and restoration of land and water-related components. This approach is consistent with both the Board's jurisdiction and the practical reality of reclamation. As summarized by the Board in its 2001 decision in the BHP Boston Licence renewal:

The NWB takes a holistic but also practical approach to reclamation: on the one hand, the NWB believes that the elements of the environment, including land and water, are interconnected: what affects one part of the environment can ultimately have an impact on other environmental elements (water and vegetation, for example). By altering the natural elements of the environment, traditional Inuit culture and use of the water can be directly affected; on the other hand, the NWB believes, where possible, that a proponent should be required to submit one single reclamation plan, without segregating land-related reclamation and water-related reclamation because reclamation activities upon abandonment will likely be more efficient and undoubtedly less onerous if conducted at the same time by the same person.²¹

Current Assessment

With respect to the assessment of security in respect of this renewal, the Board noted the specific submissions of the following parties. INAC reviewed the cost estimate summary provided by the Licensee for reclamation associated with the exploration and bulk sample program and respectfully requested that the Board consider the estimate of \$742,078 for water-related components. Although INAC did not provide specific comments on the issue of the Board's jurisdiction pursuant to s. 76(1) of the NWNSRTA for this review, INAC's prior submissions in other reviews²² indicated that it was INAC's position that the NWB should confine security required under a water licence to water-related reclamation costs only. In INAC's previous submissions it was indicated that other parties, such as the local Inuit associations, should be responsible to negotiate separate land reclamation security outside of the water licensing process and that this approach would limit the risk of overburdening the licensee with excessive security costs.

The Qikiqtani Inuit Association (QIA) provided a submission with respect to the technical review of the application and licensing process; however, QIA did not comment on the reclamation cost estimate submitted by BIMC, nor did QIA provide confirmation of the extent

²⁰ Nunavut Water Board, Reasons for Decision for 2AM-DOH0713, September 19, 2007, at p. 25.

²¹ Excerpt from the Board's 2001 renewal of the Boston Licence, as cited in the Hope Bay decision, see Nunavut Water Board, Reasons for Decision for 2AM-DOH0713, September 19, 2007, at p. 23.

²² Nunavut Water Board, Reasons for Decision for 2AM-MEA0815, June 9, 2008, at p.24

of land-related security currently being held by QIA. Based on the information available to the Board at the time of this decision, it appears that the Letter of Credit provided by BIMC to QIA had expired in October, 2010 with no further renewal, and the Board has no information regarding any other security held by QIA to ensure reclamation.

The Board notes that reclamation cost estimates for the project vary from source and submission as indicated in the table that follows, along with the most current evidence on file for security held by the QIA. The most recent estimates for reclamation have been provided in the 2010 renewal application as a summary using the Reclaim v.5.1 and previously in the March 2010 update of the Abandonment and Reclamation Plan, submitted with the 2009 Annual Report. The March 2010 estimate reflects a hypothetical planned closure date of January 2011 and progressive reclamation planned for 2010.

Source	2010 Abandonment and Reclamation Plan (renewal application)	2011 Renewal Application	QIA Letter of Credit dated August 17, 2009 (expired October 31, 2010)*	Email: March 28, 2011 correspondence; Greg Missal, BIMC
Total Reclamation (Land and Water)	\$13.2 million	\$6,738,216	\$16.5 million	Approximately \$26 million
Land Related		\$5,996,137		
Water Related		\$742, 079		

*Provided with the renewal application

Reflecting the Board's holistic approach to reclamation and in the absence of evidence regarding the adequacy of reclamation security currently held and any agreement between the various holders of security, the Board requires BIMC to furnish security sufficient to address the reclamation activities associated with the closing and abandonment of the Licensed undertaking, including both land and water activities. However, BIMC is reminded that under Part B, Item 3 of the Licence the Licensee is entitled to request that the Board review the amount of security required under the Licence, provided that the request is supported by evidence justifying the review.

Amount of Security

Given the Board's previously stated view on approaching land and water related security holistically and the objects of the Board pursuant to section 35 of the NWNSRTA²³, the Board does not accept the proposition that security for the Mary River Project should only include the costs for water-related abandonment and restoration activities. Rather, the Board has fixed the security under the Licence based on the full costs associated with the abandonment and restoration of the site of the undertaking.

²³ Section 35 states:

The objects of the Board are to provide for the conservation and utilization of waters in Nunavut, except in a national park, in a manner that will provide the optimum benefit from those waters for the residents of Nunavut in particular and Canadians in general.

In consideration of the circumstances of the current application and the comments of the parties as set out above, under Part B, Item 2 of the Licence, the Board has adopted the reclamation estimate provided by the Applicant to set the amount of security required under the Licence. In accepting BIMC's estimates, the Board is mindful of INAC's comments, asking that the Board consider as valid, BIMC's "water-related security" estimates. In addition, reflecting the Board's holistic approach to establishing security, the Board requires BIMC to furnish security in the amount of \$6,738,216, to ensure that the security posted is adequate to address all reclamation activities associated with the undertaking, both land and water-related.

Form of Security

Pursuant to s. 76(1) of the NWNSRTA, the final determination with respect to the most appropriate form of security must be left to the Minister. The Board recommends to the Minister that, the decision as to the form of the security be made in consultation with BIMC and the QIA. The Licensee should note that the estimate is subject to changes recommended by the Minister in accordance Part B, Item 3.

Timing

In maintaining consistency with previous decisions of the Board requiring the furnishing of security with the Minister in the form that is satisfactory to the Minister, the Board requires that the amount as determined be provided within thirty (30) days of issuance of this licence.

Water Use

The volume of water authorized to be withdrawn under the previous Licence was 515 cubic metres per day. Under Part C, Item 1 in the renewed licence, the Board has reduced the total authorized volume to three hundred and eighty-five (385) cubic metres per day of water consisting of sixty (60) cubic metres per day for domestic use and three hundred and twenty-five (325) cubic metres per day for drilling. This was determined based on a future water requirements provided by the Applicant which better reflects the current and immediate future water demand associated with the project at its present stage.

In its submission, the Qikiqtani Inuit Association (QIA) recommended that the NWB request additional information with respect to the water sources, which support the project's activities, in order to understand if a change in predicted environmental impact(s) will result from the change (reduction) in water use by the Licensee. As the impacts from a reduction in water use volume to a more natural flow are likely to lessen the overall potential impacts on water sources, the Board does not see the need to impose this additional requirement for monitoring at this time under the existing conditions of Part I.

Waste Disposal

Landfill Design Report and Operations and Maintenance Plan

The document entitled “Baffinland Iron Mines Corporation, Mary River Project, Bulk Sampling Program Landfill Design and Operations, November 13, 2007” was received by the NWB on November 23, 2007 and distributed for technical review and comments January 14, 2008. Comments were received through submission from the QIA, dated February 13, 2008, from Environment Canada, dated February 4, 2008 and from INAC, dated June 23, 2008. The Licensee was issued an approval letter on September 10, 2008 along with a request to review the comments received and provide a revised Plan. It was later noted that BIMC had submitted a revised document on March 31, 2008 which contained an Operations and Maintenance section, previously omitted from the earlier version. On January 21, 2009 the NWB acknowledged receipt of the addendum and provided a letter of acceptance, requesting as-built drawings and construction report within ninety (90) days of completion.

Seepage sampling is proposed to be undertaken annually at two locations downstream of the landfill. Sampling parameters will include: pH, alkalinity, conductivity, total dissolved solids (TDS), total suspended solids (TSS), phenols, nutrients, anions, total organic carbon (TOC), dissolved organic carbon (DOC), metals, and Oil & Grease. An appropriate number of samples (generally 10% of the total number of samples) will be collected for Quality Assurance / Quality Control. The Licence has incorporated this information and requires the establishment of two monitoring stations under Part I, and monitoring monthly during periods of flow.

Bulk Sample Management Plan

On October 25, 2007, the Licensee submitted a Bulk Sampling Management Plan to the Board as a requirement under the Licence. The NWB distributed the Plan for a thirty (30) day comment period on November 7, 2007. Comments were received from the Qikiqtani Inuit Association (QIA). The Licensee provided a letter dated December 18, 2007, as a response to the comments. Following submission of the Letter, a revised Bulk Sampling Management Plan was submitted to the Board as an appendix to the 2009 Annual Report, dated March 31, 2008.

Based on information in the letter accompanying the renewal application, the Licensee stated that the Bulk Sampling Program was completed in 2008, two years prior to the expiry of the previous Licence. Recognizing the importance of the of a Bulk Sampling Management Plan, the Licensee is required to advise the NWB of any further Bulk Sampling activities, as well as provide, for approval by the Board, an updated Bulk Sampling Management Plan should the Licensee contemplate additional Bulk Sampling activities. This requirement is included in under Part D, Item 24 of the Licence.

Design Drawings

The following as-built drawings have been submitted in fulfilment of requirements in Licence 2BB-MRY0710 and/or previous licences for the Mary River Project:

- a. Bulk Fuel Storage Facilities located at the Mary River and Milne Inlet camp sites;
- b. Landfill;
- c. Road alignment and stream crossings installation; and

- d. Wastewater Treatment Facilities located at the Mary River camp site and Milne Inlet camp site.

In the submission provided by the QIA, it was indicated numerous times that QIA had been unable to locate drawings and/or determine from the information accessed, whether as-built design and/or drawings for some of the above-mentioned facilities and/or infrastructure were stamped by an Engineer authorized to practice in Nunavut. With the exception of the design drawings for Milne Inlet Tote Road, all design drawings for the facilities and/or infrastructure listed above were affixed with the stamp of an Engineer authorized to practice in Nunavut.

In the Licensee's response to comments, a rationale was provided for not initially stamping the Milne Inlet Tote Road drawings. It was the Licensee's understanding that the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG) accepts a stamped document, containing drawings, to constitute the "stamping" of all the drawings contained in the document without the need to affix the stamp to each individual drawing. The Board concurs with the Licensee in this particular case, as the drawings were originally submitted as part of a document that was affixed with an Engineer's stamp. To address the QIA's concerns, the Licensee resubmitted the Milne Inlet Tote Road drawings affixed with an Engineer's stamp for the NWB files.

Geotechnical Report

The requirement to carry out a geotechnical inspection and provide a written report has been retained in this Licence renewal under Part D, Item 19, to ensure that earthworks are functioning as expected.

Site Water Management Plan

The Licensee has submitted a revised Site Water Management Plan, dated March 2010 together with the 2009 Annual Report. The Board distributed the Plan, along with other documents received with the Annual Report, for a thirty (30) day comment period. No comments were received during this review period. Following a final review of the previous and current submitted plans, the Board has approved the Plan under Part E, Item 2, in this Licence.

The Licensee is required to review the plan annually and submit any updates, in the form of an addendum along with a record of revision, for review by the Board, with the annual report.

Waste Water Management Plan

Notwithstanding the existence of an approved Waste Water Management Plan, submitted under Part D, Item 13 of the previous Licence, a revised Plan was submitted by BIMC on March 31, 2010. With the receipt of the revised Plan, and it being the most up-to-date or current Plan, the NWB has, based on previous recommendations provided during the review of the Plan, decided to provide approval of this Plan under Part D, Item 16 of this Licence.

The Licensee is required to review the plan annually and submit any updates, in the form of an addendum along with a record of revision, for review by the Board, with the annual report.

Wastewater Effluent

Authorization was granted to the Licensee to install a rotating Biological Contactor, RBC, capable of tertiary treatment of sewage, year round, at the Mary River and Milne Inlet camp sites. The RBC at the Mary River Camp was commissioned in February 2008. Prior to the installation of the RBC, latrines and a Tank-A-Lot system combined with a Polishing/Waste Stabilization Pond (PWSP) were used to treat the sewage generated.

At present, there are three PWSPs at the Mary River site used to ensure that effluent consistently meets the discharge criteria in the Licence. Treated Effluent generated during normal operating conditions is transferred by means of an insulated, submerged forcemain to Sheardown Lake.

The RBC at Milne Inlet camp site was commissioned in October 2007. A PWSP is used to ensure that the effluent quality meets discharge limits stipulated in the Licence. During normal operations, treated Effluent from the Milne Inlet camp is directed to a local ditch, which eventually flows into Milne Inlet.

Under Part D of the Licence, the NWB has appropriately included conditions for Effluent quality discharge based on the “*Guidelines for the Discharge of Treated Municipal Wastewater in the Northwest Territories, 1992*”, “Blue Book” values associated with specific types of receiving water bodies.

Comments were received from the Qikiqtani Inuit Association as whether the NWB has considered adopting the effluent limits set out in the Canadian Council of Minister of the Environment (CCME) “Canada-wide strategy for the Management of Municipal Wastewater Effluent,” instead of the typical “blue book” values used in the Licence. The NWB does recognize the existence of the CCME’s strategy; however, it notes that the implementation of the strategy in northern environments has been delayed, pending the results of the CCME Coordinating Committee Northern Working Group and recommendations. As such, the NWB does not consider it appropriate at this time to impose effluent quality limits under the proposed *Waste Water Systems Effluent Regulations* when the application of these limits to Nunavut is under review and has been postponed until 2014, at the earliest.

As a result, until wastewater effluent quality limits reflective of unique northern requirements have been adopted, the Board has determined that the limits set out in the “blue book” continue to be appropriate.

Drilling Operations

Under Part F of the terms and conditions in the Licence, drilling is permitted on-land and on ice. In addition, requirements have been included in the Licence, Part F, Item 2, to permit drilling within thirty (30) metres from the high water mark for the purpose of conducting

geotechnical investigations, provided that the Licensee submit a written request to the Board ten (10) days in advance of drilling.

Spill Contingency Planning

On August the 17, 2007 the Board received the Spill Contingency Plan (SCP) that was required under Licence 2BB-MRY0710. The Board distributed the Plan on August 29, 2007 for a thirty (30) day public-review period. Comments were received from Environment Canada (EC), and Indian and Northern Affairs Canada (INAC). The NWB reviewed the Plan, considered the comments received and approved it on November 14, 2007 under Motion 2007-14-03. Licensee revised the approved Spill Contingency Plan in March 2008, 2009 and 2010 respectively.

Although an approved plan does exist under the previous licence, the Board has approved the most recent version of the SCP, dated March 2010, under Part G, Item 1 of this Licence. No changes are required under the plan at this time; however, to ensure that the plan remains up-to-date, the Licensee is required to review the Plan annually and update as required under Part B, Item 11.

Part G, Item 3 of the previous licence required the submission of a report to be approved by the Board, within ninety (90) days of issuance of the licence, prepared by an appropriately qualified Engineer registered in Nunavut, which clearly indicated that the requirements of the CCME guidance document “*Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)*” have been met by the Licensee.

A report was submitted on April 13, 2007 indicating that the only fuel stored on site at the time was in 205L drums and that the CCME requirements did not apply at the time. Since the report, BIMC has constructed a bulk fuel storage facility for the storage of fuel during the bulk sampling program, which was completed in 2008. This facility is still in place and as such, the NWB has requested a further report to indicate that the current facility meets the CCME requirements.

Abandonment, Restoration or Temporary Closure

An A&R Plan, dated March 2010, was submitted to the Board with the renewal application on January 6, 2011. Since this Plan is the most recent version on file, and was submitted as an update to the 2009 A&R Plan, the NWB has decided to approve it under Part H, Item 1 of the Licence terms and conditions rather than carrying over the previously approved A&R Plan. In addition, the Board has reinstated the requirements that apply to re-grading of roads, air-strip and disturbed areas to natural contour and/or pre-disturbed state. These conditions were initially removed under Amendment No.2 to Licence 2BB-MRY0710 because they were satisfactorily addressed in the approved Abandonment and Restoration Plan. However, recognizing the comments received and the importance of Restoration activities, the Board has reinstated those conditions under Part H, Items 7, 9, 11 and 13 respectively.

The Licensee is required to submit an addendum to the approved Plan within thirty (30) days from the date of issuance of this Licence to address INAC's comments. Furthermore, to ensure that the plan remains consistent with the project's activities, the Board has added a requirement to review the Plan annually and update as required.

Monitoring Program

Environmental Monitoring Plan

On October 28, 2010, as required by the previous Licence, the Licensee submitted to the Board a Comprehensive Environmental Monitoring Plan dated October 4, 2007. The Plan was distributed on October 28, 2010 for a thirty (30) day comment period. On or before the deadline for comments, submissions were received from GN-CLEY and EC. The Licensee is required under Part I, Item 1, to submit to the Board, for approval, within ninety (90) days from the date of issuance of this Licence, a revised Environmental Monitoring Plan. The revised Plan shall incorporate the original comments from EC and GN-CLEY and consider the scope of the renewed Licence, operational plans and monitoring requirements.

Based on the Landfill Design and Operations Plan that was submitted with the 2009 Annual Report, additional Monitoring Stations for the landfill have been included under Part I with compliance required under Part D, Items 12 and 21. These stations are to provide monitoring data on seepage effluent that maybe emitted from the constructed landfill.

Quality Assurance/Quality Control (QA/QC) Plan

The latest Plan on file with the NWB was submitted in 2008 with an approval letter from the Analyst on May 25, 2009. The Board has included the requirement for an updated Plan and Analyst approval letter to be submitted within sixty (60) days following the date of issuance of this Licence.

Other

Consultations

Indian and Northern Affairs Canada (INAC) and the Qikiqtani Inuit Association (QIA) requested that the Licensee provide records of consultations with the stakeholders in each community affected by the project. In response to these requests, the Licensee has provided to the Board, as well as to intervening parties, the attendance sheets and comments compiled during community consultations sessions hosted by the Licensee.

Public Registry

The Nunavut Water Board is required by regulation to maintain a public registry of all water licence applications and documents that it receives. The Board's main repository is based in Gjoa Haven, Nunavut. Web access to the repository is provided through the NWB's ftp site, which is a separate entity; every effort is made to maintain consistency between the NWB head

office public registry and the electronic public access ftp site, which is an extension of this registry. For records, the NWB main office public registry is considered to be the official registry as required by s. 78(1) of the Act.²⁴.

The QIA stated that no information was identified on the NWB's Public Registry, File Transfer Protocol (ftp) website to confirm whether or not the plans and/or documents required under the terms and conditions of the licence had been approved and/or accepted. The Board advises the QIA, the public and all interested parties to contact the Board if they are unable to access information pertaining to any application, including questions regarding the status and availability of plans, documents and drawings submitted to the Board.

²⁴ S.78. (1) of the Act reads:

The Board shall maintain at its main office, in the form prescribed by the regulations, a register convenient for use by the public, in which shall be entered, with respect to each application filed with the Board and with respect to each licence issued by it, such information as is prescribed by the regulations.]



NUNAVUT WATER BOARD WATER LICENCE RENEWAL

Licence No. 2BB-MRY1114

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 1016, 120 ADELAIDE STREET WEST, TORONTO, ON M5H 1T1

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: 2BB-MRY1114 TYPE "B"

Water Management Area: NUNAVUT 05

Location: MARY RIVER PROJECT
QIKIQTANI REGION, NUNAVUT

Classification: MINING AND MILLING UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not
to Exceed: THREE HUNDRED AND EIGHTY FIVE (385)
CUBIC METRES PER DAY

Date of Licence Issuance: April 5, 2011

Expiry of Licence: April 5, 2014

This Licence renewal issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

**Thomas Kabloona,
Nunavut Water Board, Chair**

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of water and the deposit of waste for a Mining and Milling undertaking classified as per Schedule II of the *Regulations* at the Mary River Project, located approximately 160 kilometres south of Pond Inlet within the Qikiqtani Region, Nunavut. This Licence allows for exploration and bulk sampling operations, all-weather road construction, land based and on-ice drilling, a geotechnical drilling program, progressive reclamation programs, activities in support of engineering and scientific studies related to the draft EIS, ongoing maintenance to existing project infrastructure, camp operations, domestic waste treatment and/or disposal, fuel containment, and all associated uses at the Mary River Project.

- a. This Licence is issued subject to the 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 *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such *Regulations*, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

2. Definitions

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**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.

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence and modifications inconsistent with the terms and conditions of the Licence;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of waste is permitted by a licence issued by the Board;

“**Board**” means the Nunavut Water Board established under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“Bulk Fuel Storage Facility” means the fuel storage facilities as described in the as-built construction report for the Mary River Camp (Ref. No. 09-058) and the construction Report for the fuel storage facility at Milne Inlet (Ref. No. 06-090);

Bulk Sampling Program means the activities described in the amendment application dated November 15, 2006; the Bulk Sampling Management Plan dated October 24, 2007 and the Updated Bulk Sampling Management Plan dated March 31, 2008. .

“Effluent” means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, Landfarm or a treatment plant;

“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*;

“Greywater” means all liquid wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes;

“ICP Scan” means the laboratory method for determining trace metals in water through Emission Spectroscopy using inductively coupled plasma (including from approximately 22 to 32 elements, depending on the laboratory performing the analysis);

“Infrastructure” means all construction necessary for mining, such as watercourse crossings, piping, sewage and water systems, reservoirs, and roads;

“Inspector” means an Inspector designated by the Minister under s. 85 (1) of the *Act*;

“Licensee” means the holder of this Licence;

“Minewater” means groundwater or any water used in mining, which is pumped or flows out of any underground workings or open pit;

“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, but does not include an expansion;

“Non-Hazardous Waste Landfill” means the facility as described in the report entitled “Mary River Project, Mary River Landfill QA/QC Report (As-built Report), Genivar Consultants LP, September 2, 2010 for the disposal of non-hazardous solid waste;

“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;

“Polishing/Waste Stabilization Ponds” (PWSP) means the containment ponds designed as interim and/or contingency containment of sewage at the Mary River and Milne Inlet Camps;

“Regulations” means the *Northwest Territories Water Regulations SOR/93-303 8th June, 1993*, and application of Regulations Order SOR/2002-253 12 July, 2002;

“Sewage” means all toilet wastes and greywater;

“Spill Contingency Plan” means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

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

“Toilet Wastes” means all human excreta and associated products, but does not include greywater;

“Waste” means, as defined in s. 4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means.

“Waste Water Treatment Facilities” (WWTF) means the treatment facilities and/or associated contingency infrastructure used for the treatment of sewage at the Mary River Camp(s) and the Milne Inlet Camp.

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*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge 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 law.

PART B: GENERAL CONDITIONS

1. The water use fees payable to the Receiver General for Canada shall be sent to the Board annually for the right to the use of water, in accordance with Section 9 of the *Regulations*.
2. The Licensee shall, within thirty (30) days of issuance of this licence, furnish and maintain security with the Minister in the form that is satisfactory to the Minister, in the amount of six million, seven hundred thirty eight thousand, two hundred sixteen (6,738,216) dollars.
3. The Licensee shall furnish and maintain security with the Minister as required by the Board in a form and amount acceptable to the Minister.
4. The Licensee may, submit to the Board for approval, a written request for a reduction to the amount of security. The submission shall include supporting evidence to justify the request.
5. The security deposit shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Abandonment and Restoration Plan. This clause shall survive the expiry of this Licence.
6. The Licensee shall file with the Board no later than March 31st of the year following the calendar year being reported, an Annual Report on the appurtenant undertaking which shall contain the following information:
 - a. the monthly and annual volumes, in cubic metres, of all fresh water obtained from Camp Lake at Monitoring Station MRY-1, Phillips Creek at Monitoring Station MRY-2, Km 99 Lake at Monitoring Station MRY-3, and additional sources of water identified for camp use under Part C, Item 1;
 - b. the monthly and annual volumes in cubic metres of all freshwater obtained for the purpose of drilling and other associated uses;
 - c. the monthly and annual volume in cubic meters of treated Sewage effluent discharged at Monitoring Station MRY-4, Mary River Camp WWTF at Monitoring Station MRY-5, and at Milne Inlet Camp WWTF Monitoring Station at MRY-5 along with any waters discharged from the respective PWSPs;
 - d. the monthly and annual volumes in cubic metres of Sludge removed from the Waste Water Treatment Facilities at Mary River Camp and Milne Inlet Camp and details on the storage and/or disposal;
 - e. a summary, including photographic records before, during and after construction activities, of any modifications and/or major maintenance work carried out on

- the Water Supply and the Wastewater Treatment Facilities, including all associated structures, and an outline of any work anticipated for the next year;
- f. the geochemical analysis of drill cores as per Part F, Item 3;
 - g. a detailed discussion on the performance, installation, and evaluation, including the use of photographic record, of the primary and secondary containment functions used in fuel storage to safeguard impacts to freshwaters;
 - h. a list of unauthorized discharges and a summary of follow-up action(s) taken;
 - i. a brief description of follow-up action(s) taken to address concerns presented within inspection and compliance reports prepared by the Inspector;
 - j. an update, where required under Part B, Item 11, in the form of an addendum or revision to the Abandonment and Restoration Plan, Emergency Spill Response Plan, Site Water Management Plan, Waste Water Management Plan, Waste Rock and Ore Storage Plan, QA/QC, Landfill Operations and Maintenance Plan, and Landfarm Plan;
 - k. a description of all progressive and or final reclamation work undertaken, including drill sites, presented with photographic records of site conditions before, during and after completion of operations;
 - l. an updated estimate of the current restoration liability required under Part B, Item 2, based upon the results of progressive restoration, restoration research, project development monitoring, and any changes or modifications to the project;
 - m. tabular summaries of all data generated under the Monitoring Program, Part I;
 - n. a summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;
 - o. a summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed; and
 - p. any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.
7. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.

8. 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.
9. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
10. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
11. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans, including a record of revision, are to be submitted in the form of an Addendum to be included with the Annual Report.
12. 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 conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
13. The Licensee shall post signs in the appropriate areas to identify the location of Monitoring Stations designated under Part I. All signs shall be located and maintained to the satisfaction of an Inspector.
14. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

(a) **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@nunavutwaterboard.org

(b) **Inspector Contact:**

Manager of Field Operations, INAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445

15. The Licensee shall submit one paper copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
16. The Licensee is responsible to ensure that any documents or correspondence submitted by the Licensee to the Board have been received and acknowledged by the Manager of Licensing.
17. This Licence is assignable as provided for in s. 44 of the *Act*.
18. The expiry or cancellation of this Licence does not relieve the holder from any obligations imposed by the Licence as per s. 46 of the *Act*.

PART C: CONDITIONS APPLYING TO WATER USE

1. The Licensee shall obtain all water for domestic purposes from the following locations, or as otherwise approved by the Board:
 - a. Mary River Camp – Camp Lake at Monitoring Station MRY-1;
 - b. Milne Inlet Camp – Philips Creek at Monitoring Station MRY-2;
 - c. Km 99 Lake at Monitoring Station MRY-3;
 - d. An Alternative water source to for Milne Camp at Km 32 Lake;
 - e. Deposit 4 Camp – Proposed under Amendment No. 1 application and to be identified prior to use;
 - f. Rail Camp – an adjacent unnamed lake; and
 - g. Steensby Inlet camp – an unnamed lake near camp or the alternative source of water identified in the application.

Total water volume for camp use from all sources referenced above shall not exceed sixty (60) cubic metres per day. The total volume of water for drilling and associate uses shall be obtained from sources proximal to drill targets, or as otherwise approved by the Board and shall not to exceed three hundred and twenty-five (325) cubic metres per day. Total volume of water for the purpose of this Licence shall not exceed three hundred and eighty-five (385) cubic metres per day.

2. The Licensee shall maintain the Water Supply Facilities to the satisfaction of the inspector.
3. Streams cannot be used as a water source unless authorized and approved by the Board in writing.
4. The Licensee shall, at least thirty (30) days prior to the commencement of use of water, submit the following to the Board for approval in writing, in cases where the Licensee requires water in sufficient volume that the source water body may be drawn down:

volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.

5. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.
6. The Licensee shall not remove any material from below the ordinary high water mark of any water body unless authorized.
7. The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
8. The Licensee shall implement Sediment and erosion control measures prior to and maintain such measures during the undertaking to prevent entry of sediment into water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. 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.
2. The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
3. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood so as 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.
4. 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 the Hamlet of Pond Inlet and/or any other hamlet that is the recipient of such waste, which clearly states that authorization has been granted for the deposit of approved solid waste by the Licensee, in the Hamlet's NWB licensed solid waste facility.
5. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation, at a licensed waste disposal site.
6. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request by the Board in writing.

7. The Licensee shall dispose of all Sewage waste generated at the Mary River Camp and the Milne Inlet Camp to the Waste Water Treatment Facilities, or as otherwise approved by the Board.
8. The Licensee shall contain all greywater in a sump located at a distance of at least thirty-one (31) metres above the ordinary high water mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.
9. The Licensee shall contain all other toilet wastes in latrine pits or use incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty-one (31) metres above the ordinary high water mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment.
10. The Licensee shall notify an inspector at least ten (10) days prior to any discharge from facilities under this part.
11. The Licensee shall ensure that all Mine water and surface drainage from the weathered ore stockpiles shall be directed to a discharge location that will allow for monitoring.
12. All Effluent discharged from the two Bulk Sample open pits, weathered ore stockpiles, lump ore and fine ore stockpiles at Monitoring Stations MRY-8, MRY-9, MRY-10, MRY-12 and MRY-13 shall not exceed the following Effluent quality limits:

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
The waste discharge shall have a pH of between 6.0 and 9.5	

13. All Sewage Effluent discharged from the Waste Water Treatment Facility, at Monitoring Stations MRY-4 and MRY-4a shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
BOD ₅	30 mg/L
Total Suspended Solids	35 mg/L
Faecal Coliform	1000 CFU/100 mL

Oil and Grease	No visible sheen
pH	Between 6.0 and 9.5

14. All Sewage discharged from the Waste Water Treatment Facility at Monitoring Station MRY-5 and MRY-5a shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of Any Grab Sample (mg/L)
BOD ₅	100 mg/L
Total Suspended Solids	120 mg/L
Faecal Coliform	10,000 CFU/100 mL
Oil and Grease	No visible sheen
pH	Between 6.0 and 9.5

15. The licensee shall ensure that effluent discharged from monitoring stations MRY-4 and MRY-4a, and MRY-5 and MRY-5a, is demonstrated to be non-acutely toxic through testing in accordance with Part I, Item 5.
16. The Board approved the Plan entitled “Waste Water Management Plan,” dated March 31, 2010. The Licensee is required to update the plan annually and submit any changes, in the form of an addendum complete with a record of revision, to the Board for review by March 31st of the year following the update.
17. All PWSP discharges shall be released in a manner so as to minimize surface erosion.
18. The Licensee shall ensure that PWSP’s are designed and bermed to ensure there is no seepage. A report on seepage shall be included as part of the Annual Report required under Part B, Item 6.
19. An inspection of the earthworks, geological regime, and the hydrological regime of the Project is to be carried out during the summer of 2011, by a Geotechnical Engineer. The Geotechnical Engineer’s report shall be submitted to the Board within sixty (60) days of the inspection, with a covering letter from the Licensee outlining an implementation plan to respond to the Engineer’s recommendations.
20. All effluent discharged from the Bulk Fuel Storage Facilities at Monitoring Stations MRY-6 and MRY-7, shall not exceed the following effluent quality limits:

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

21. All Effluent discharged from the Non-Hazardous Waste Landfill at Monitoring Stations MRY-11a and MRY-11b shall not exceed the Effluent quality limits contained in Part D, Item 12.
22. The Licensee shall maintain all constructed facilities, including the fresh water intakes, Waste Water Treatment Facilities, Bulk Fuel Storage Facilities and the Polishing/Waste Stabilization Ponds (PWSPs) to the satisfaction of an Inspector.
23. The Board has previously approved the document entitled “Landfill Design and Operations (REF. NO. NB 102-00181/10-6)” dated March 31, 2008. This document remains valid under this Licence, subject to annual reviews and revisions as required under Part B, Item 11.
24. The Licensee shall submit to the Board, for approval, within sixty (60) days prior to the commencement of any further Bulk Sampling activities under this Licence, a revised Bulk Sampling Management Plan which addresses Acid Rock Drainage and Metal Leaching potential through the verification of Kinetic testing, Waste Rock Storage and Ore Storage management.
25. The Licensee shall contain all Greywater, not directed to the WWTF, in a sump located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board.

PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

1. 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 as to minimize impacts on surface drainage.
2. The Board has approved the plan entitled “2010 Site Water Management Plan,” revised March 31, 2010 and submitted with the 2009 annual report.
3. All activities shall be conducted in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake any corrective measures in the event of any impacts on surface drainage.
4. Winter lake and stream crossings, including ice bridges, shall be constructed entirely of water, ice or snow. The Licensee should 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.
5. With respect to access road, pad construction or other earthworks, the deposition of

debris or sediment into or onto any water body is prohibited. 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. The Licensee shall ensure that any chemicals or waste associated with undertakings do not enter any water body

6. The Licensee shall not cut any stream bank or remove any material from below the ordinary high water mark of any water body.
7. The Licensee shall not do anything that will cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
8. The Licensee shall implement sediment and erosion control measures prior to and maintain such measures during construction and operation to prevent entry of sediment into water.
9. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.
10. The Licensee shall limit any in-stream activity to low water periods. In-stream activity is prohibited during fish migration.
11. The Licensee shall locate stream crossings to minimize approach grades. Approaches shall be stabilized during construction and upon completion of the project, to control runoff, erosion and subsequent siltation to any water body.
12. Machinery is not permitted to travel up the stream bed and fording of any water body is to be kept to a minimum and limited to one area and a one-time event. Equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks.
13. The Licensee shall ensure that pollutants from machinery fording the crossings do not enter water
14. The Licensee shall ensure that all fill material used during construction is from an approved source and shall be free of contaminants.
15. To minimize impacts on surface drainage, the Licensee shall prepare all sites in such a manner as to prevent rutting of the ground surface.
16. Equipment storage holding areas should be located on gravel, sand or other durable land, 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.
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 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.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee shall not conduct any land-based drilling within thirty-one (31) metres of the ordinary high water mark of any water body, unless otherwise approved by the Board in writing.
2. The Licensee may, for the purpose of geotechnical investigations as describe in the application for Amendment No.2 to previous Licence 2BB-MRY0710, carry out drilling activities within thirty (30) metres of the high water mark of any water body, provided that such activities are consistent with the terms of this Licence and a request has been submitted and received by the NWB, ten (10) days in advance of drilling, that includes a thorough description of the proposed activities and the following:
 - a. An appropriate scaled site map, complete with approximate GPS coordinates of planned drilling locations and the associated water bodies;
 - b. Locations of waste deposition, that are consistent with Part F, Item 4, and
 - c. Mitigation measures that are planned to be in place, prior to, during drilling and following if required to protect waters.
3. The Licensee shall analyze the geochemical constituents of drill cores as follows:
 - a. That reflects actual conditions and is truly representative of the drilling program for all constituents that may impact waters as determined, and clearly qualified, by a Geochemist registered in Nunavut;
 - b. All assumptions, and any limitation to each assumption, in determining a representative sampling population reflecting actual conditions and the geochemical testing methods employed;
 - c. Includes all raw data and an accompanying summary table of the geochemical analysis;
 - d. Define clear conclusions on the results of the geochemical analysis; and
 - e. Present the geochemical analysis in the Annual Report as required by Part B, Item 6(f).
4. The Licensee shall dispose of all drill waste, including water, chips, muds and salts (CaCl₂) in any quantity or concentration, from land-based drilling, in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty one (31) metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.

5. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.
6. If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report to NWB, including the location (GPS coordinates) and dates.
7. If the bottom of the permanently frozen ground, or permafrost, is broken through by the drill, the depth of the bottom of permafrost and location should be reported in the annual report to the Board for data management purposes.
8. For “on-Ice” drilling where drill additives are not being used, return water released must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers of the Environment, Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10 mg/L for lakes with background levels under 100 mg/L or 10% for those above 100 mg/L).
9. The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.

PART G: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Board has approved the Plan entitled “Spill Contingency Plan,” revised March 31, 2010 that was submitted as additional information with the 2009 Annual Report.
2. The Licensee shall provide a report, to be approved by the Board, within ninety (90) days of issuance of the licence, appropriately qualified by an Engineer registered in Nunavut, which clearly details that the requirements of the CCME guidance document “*Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)*” have been met by the Licensee.
3. 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.
4. The Licensee shall ensure that any chemicals, petroleum products or wastes associated with the project do not enter 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.
5. The Licensee shall ensure that any equipment maintenance and servicing be conducted only in designated areas and shall implement special procedures (such as the use of drip

pans) to manage motor fluids and other waste and contain potential spills.

6. If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. Employ the approved Spill Contingency Plan;
 - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
 - c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.

PART H: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING

1. The Board has approved the Plan entitled “2010 Abandonment and Reclamation Plan”, dated March 31, 2010, submitted as additional information with the Application.
2. The Licensee shall submit within thirty (30) days from the issuance of this Licence, an addendum to the Plan referred to in Part H, Item 1, to address the following:
 - a. Include a site map depicting site spill kits, nearby water bodies, camp infrastructure and other relevant information; and
 - b. Include procedures for conducting site assessments prior to temporary closure of the site.
3. Licensee shall complete all restoration work prior to the expiry of this Licence.
4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
5. The Licensee shall backfill and restore, to the satisfaction of an Inspector, all sumps to the pre-existing natural contours of the land.
6. 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.
7. All roads and airstrips, if any, shall be re-graded to match the natural contour in order to reduce erosion.

8. The Licensee shall, unless otherwise identified within the approved Plan under Part H, Item 1, remove all Culverts and open the natural drainage channel. In carrying out this activity, measures shall be implemented to minimize erosion and sedimentation.
9. 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.
10. 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.
11. The Licensee shall restore all drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. The restoration of drill holes must include the removal of any drill casing materials and the capping of holes with a permanent seal.
12. The Licensee may store drill cores produced by the appurtenant undertaking in an appropriate manner and location at least thirty one (31) metres above the ordinary high water mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created.
13. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.

PART I: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Licensee shall submit to the Board for approval within ninety (90) days of the issuance of this licence a revised Environmental Monitoring Plan, which addresses but is not limited to the following:
 - a. Comments and recommendations made by intervening parties including Environment Canada (EC) during review of the plan submitted October 7, 2007.

2. The Licensee shall, at a minimum, maintain Monitoring Stations at the following locations:

Monitoring Program Station Number	Description	Status
MRY-1	Water supply for the Mary River Camp at Camp Lake	Active-Volume
MRY-2	Summer water supply for the Milne Inlet Camp at Phillips Creek	Active- Volume
MRY-3	Winter water supply for the Milne Inlet Camp at Km 99 Lake	Active Volume
MRY-4	Mary River Camp sewage discharge at the WWTF	Active
MRY-4a	Mary River Camp sewage discharge from the PWSP	Active
MRY-5	Milne Inlet Camp sewage discharge at the WWTF	Active
MRY-5a	Milne Inlet Camp sewage discharge from the PWSP	Active
MRY-6	Water collected within the Bulk Fuel Storage Facility at Mary River prior to release	Active
MRY-7	Water collected within the Bulk Fuel Storage Facility at Milne Inlet prior to release	Active
MRY-8	Minewater and surface drainage either pumped or released from Hematite Open Pit	Active
MRY-9	Minewater and surface drainage either pumped or released from the Magnetite Open Pit	Active
MRY-10	Surface discharge from the weathered ore stockpile	Active
MRY-11a	Non-Hazardous Waste Landfill Downstream, location a	Active
MRY-11b	Non-Hazardous Waste Landfill Downstream, location b	Active
MRY-12	Surface discharged from the lump ore and fine ore stockpile at the processing area	Active
MRY-13	Surface discharge from the lump ore and fine ore stockpile at the Milne Inlet	Active

3. The Licensee shall locate, with the assistance of the Inspector where necessary, Monitoring Station numbers MRY-11a and MRY-11b, located downstream of the Non-Hazardous Waste Landfill as identified in the Environmental Monitoring Plan referred to in Part I, Item 1.

4. The Licensee shall sample at Monitoring Program Stations MRY-4 and MRY-5 every four (4) weeks during discharge and at Monitoring Stations MRY-4a and MRY-5a, once prior to discharge and every four (4) weeks thereafter. Samples shall be analyzed for the following parameters:
 - Biochemical Oxygen Demand - BOD
 - Total Suspended Solids
 - pH
 - Faecal Coliforms
 - Oil and Grease (visual)
5. The Licensee shall conduct toxicity testing on treated sewage effluent at the final discharge points at the Monitoring Station(s) MRY-4 and/or MRY-4a; and MRY-5 and/or MRY-5a, once annually during open water season in accordance with the following test procedures:
 - 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).
6. The Licensee shall sample at:
 - a. Monitoring Program Stations MRY-6 and MRY-7 monthly during removal of water from the facilities as required by Part D, Item 20; and
 - b. Monitoring Program Stations MRY-8, MRY-9, MRY-10, MRY-11a and MRY-11b and MRY-12 and MRY-13, monthly and during period of observed flows as required by Part D, Item 12 and 21.
7. The Licensee shall analyze the samples obtained at Monitoring Program Stations MRY-11a and MRY-11b for the following parameters:
 - pH
 - Alkalinity
 - Conductivity
 - Total Dissolved Solids (TDS)
 - Total Suspended Solids (TSS)
 - Oil&Grease
 - Phenols
 - 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

8. The Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board.
9. The Licensee shall measure and record, in cubic metres, the daily volume of water utilized for camp, drilling and other purposes.
10. An Inspector may impose additional monitoring requirements.
11. The Board has accepted the Quality Assurance/Quality Control Plan (QA/QC), dated March 31, 2008 and the Analyst approval for the document dated May 25, 2009. The Licensee is required to submit to the Board for review, within ninety (90) days from the date of issuance of this Licence, an updated stand-alone QA/QC Plan taking into consideration Part I, Items 14 and 15, along with a letter of approval from an Analyst.
12. The approved Quality Assurance/Quality Control Plan shall be submitted to the Board for review and implemented as approved by an Analyst.
13. 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.
14. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board.
15. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
16. The Licensee shall measure and record the following:
 - a. the quantities, in cubic metres, of domestic waste, sewage, and hazardous waste hauled off-site for disposal;
 - b. the location and name of the disposal facility for each waste type noted above; and
 - c. the date that each waste type was hauled off-site for disposal, for each occasion that these are removed from the site.
17. 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 utilizing water.
18. 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 areas where wastes associated with camp, drilling and Infrastructure operations are deposited. The Licensee shall report these coordinates to the Inspector prior to depositing waste.

19. A Monitoring Program summary report shall be submitted to the Board for review within thirty (30) days following the month being reported. This summary shall include, at a minimum, all the monitoring requirements under this Part.
20. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
21. The Licensee shall obtain representative samples of the water column below any ice, where required under Part F, Items 8 and 9. Monitoring shall include, at minimum the following:
 - Total Suspended Solids
 - Electrical Conductivity
 - pH
 - 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
22. Licensee shall include in the Annual Report required under Part B, Item 6 all data, monitoring results and information required by this Part.

PART J: CONDITIONS APPLYING TO CONSTRUCTION AND MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - i. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - ii. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - iii. such Modifications are consistent with the NIRB Screening Decision;
 - iv. the Board has not, during the 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
 - v. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part J, Item 1 have not been met can be carried out only with written approval from the Board.

3. 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.