



Water Resources Division
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Phyllis Beaulieu
Manager Licensing
Nunavut Water Board
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Your file - Votre référence
2BB-MRY1114
Our file - Notre référence
CIDM# 779359

**Re: 2BB-MRY1114 – Baffinland Iron Mines Corporation – Mary River Exploration Project
– Application for Renewal and Amendment**

Dear Phyllis Beaulieu:

Aboriginal Affairs and Northern Development Canada (AANDC) conducted a review of the Baffinland Iron Mines Corporation's application for renewal and amendment of Type 'B' Water Licence 2BB-MRY1114, as requested by the Nunavut Water Board (NWB) on January 17, 2014.

The following advice has been provided pursuant to AANDC's mandated responsibilities for the enforcement of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*. In conducting our review, AANDC Water Resources referred to the documents on the NWB FTP site under 2BB-MRY.

The Water Resources Division appreciates the opportunity to provide comments to the NWB on the proposed renewal and amendment of Water Licence 2BB-MRY1114. Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4738 or by e-mail at jean.allen@aandc-aadnc.gc.ca

Sincerely,

Jean Allen
Water Management Specialist

Cc. Murray Ball, Manager of Water Resources, AANDC
Karen Costello, Director of Resource Management, AANDC
Erik Allain, Manager of Field Operations, AANDC

Technical Review Memorandum

To: Phyllis Beaulieu – Manager of Licensing, NWB

From: Jean Allen – Water Management Specialist, AANDC

**Re: 2BB-MRY1114 – Baffinland Iron Mines Corporation – Mary River Exploration Project
– Application for Renewal and Amendment**

A. Introduction

The Nunavut Water Board (NWB or Board) issued Baffinland Iron Mines Corporation's (Baffinland or BIMC) Type 'B' Water Licence 2BB-MRY1114 (2BB-MRY1114) on April 5, 2011 to use water and deposit waste in support of ongoing basic and advanced exploration activities and undertakings, including a bulk sampling program on Deposit 1.

Baffinland's Type 'A' Water Licence 2AM-MRY1325 (2AM-MRY1325) was issued by the NWB on June 10, 2013 and approved by the Minister of Aboriginal Affairs and Northern Development Canada (AANDC) on July 15, 2013. Following issuance of 2AM-MRY1325, the NWB issued an amendment to 2BB-MRY1114 on December 4, 2013 to remove redundant activities and undertakings captured under both licences.

Baffinland submitted an application to renew and amend 2BB-MRY1114 to permit ongoing exploration activities including surface drilling and trenching, geotechnical drilling, and potentially a bulk sampling program. In the application, Baffinland requested the ability to establish satellite camps to support exploration activities, for the execution of sealifts along Nuvut Peninsula, and for potential bulk sampling programs on sites other than Deposit 1.

The Nunavut Impact Review Board (NIRB) requested more information from Baffinland regarding the scope of the application on February 7, 2014 and on February 12, 2013, Baffinland clarified that they are no longer seeking any amendment relating to bulk sampling activities, use of sealift and laydown areas, or construction of winter roads, pioneer roads and trails, winter stream/river crossings, airstrips and ice strips.

Baffinland is requesting the use of 299 cubic metres per day (m^3/day) which includes $250 \text{ m}^3/\text{day}$ for exploration and geotechnical drilling and $49 \text{ m}^3/\text{day}$ for domestic use for satellite exploration camps. Wastes will consist mainly of camp wastes and drilling waste and will be managed in accordance with 2AM-MRY1325. It is anticipated that a total of up to 20 m^3 of fuel could be stored at existing and new satellite exploration camps.

B. Results of Review

AANDC Water Resources Division offers the following comments/ recommendations for the Board's consideration in regards to the application for renewal and amendment of the Type 'B' Water Licence 2BB-MRY1114 (the application).

General

1. Baffinland wishes to retain the ability to establish satellite camps to support drilling programs and requests that the NWB remove the general prohibition in the licence and include a condition that would enable them to proceed with the development of satellite camps. AANDC recommends that the licensee be required to submit coordinates (including coordinates for proposed water source(s) and deposit(s) of waste), size, duration, and construction details for each camp prior to their construction.
2. The Nunavut Planning Commission (NPC) confirmed in their January 6, 2011 letter that the renewal request to 2BB-MRY0710 does not require a NPC conformity determination to the North Baffin Regional Land Use Plan. Similarly, the Nunavut Impact Review Board (NIRB) confirmed in their February 23, 2011 email that additional screening is not required for extension of the Type 'B' Water Licence 2BB-MRY0710. In their application, Baffinland indicated that the proposed amendment does not change the original NPC conformity and NIRB screening determinations. It is unclear, however, that particular activities in the amendment application, such as satellite camps and surface exploration activities, including trenching, have been considered by NPC and NIRB. Conformity with the NPC and screening by the NIRB for these additional activities should be confirmed prior to water licence approval.
3. Baffinland requests a licence term of 25 years. AANDC recommends a licence term substantially less than 25 years (i.e. 5 years) because revised management plans remain outstanding and Baffinland is thus considered to be in non-compliance with requirements of 2BB-MRY1114 (particularly Part G, Item 1, Part I, Item 1, Part J, Item 1, and Part J, Item 2).

Water Use

4. In Section 5.8 of the Project Description, Baffinland proposes to establish up to 7 satellite camps (49-person or less per camp) to support exploration and drilling activities and they will be limited to a total of 49 m³ / day. It is expected that no more than 2 camps will be utilized at any given time. Baffinland proposes that they will provide the Board with 30 days notice to establish any of the 7 potential camps listed in the table (including information about power supply, fuel depot, methods of sewage disposal/treatment, waste management facilities, water sources, proposed security increase) and 60 days notice for any additional camps. AANDC agrees with this approach and recommends that the coordinates of the proposed camps and water sources also be provided with notice to the Board. Additionally, it is recommended that Baffinland also provide confirmation that all authorizations (i.e. land use permits) are in place to establish camps in "other" locations. If approved by the NWB, AANDC notes that the amount of water use fees may need to be adjusted in accordance with Section 12 of the Nunavut Water Regulations to account for the use of water on, in, or flowing through Crown lands.
5. Section 6.0 of the Project Description indicates that specific sources of water cannot be identified at this time and BIMC proposes to report precise locations of water supply and quantities drawn in subsequent annual reports. AANDC recommends that Baffinland be required to also report coordinates of drill sites and water sources in monthly monitoring reports so that AANDC Inspectors will be aware of water use locations within the project area in a more timely fashion.

Management Plans

6. According to the Project Description, Baffinland proposes that the Waste Management Plan (Section 7.0) and Spill Contingency Plan (Section 11.0) approved under 2AM-MRY1325 will be updated to include an addendum to deal explicitly with the renewed 2BB-MRY1114. AANDC supports the idea that the 2BB plans should be well integrated with the 2AM plans. However, in order to maintain the appropriate legal connection between each plan and its corresponding licence, AANDC recommends that stand-alone documents containing plans for activities under 2BB-MRY1114 be submitted to the NWB for approval rather than being submitted as an addendum under 2AM-MRY1325. The existing plans greatly exceed the reduced scope of 2BB-MRY1114 (Amendment 1) and there are several sections that require updating to reflect the proposed scope in the amendment application. For example, the Comprehensive Environmental Monitoring Plan (CEMP) required under Part J, Item 1 of 2BB-MRY1114 Amendment 1) requires the following revisions:
- a) Section 4.7 Water Quality – including 4.7.2 (Drill Water) - the total allowable daily water use for camp and drill water supply is 60 m³ and 325 m³ respectively. An update is required to bring the total volume to what is currently allowed in the water licence (299 m³ / day total).
 - b) Section 4.9 Waste Management – waste will be managed according to 2AM-MRY1325. This section should be revised to highlight waste management activities that are specific to the reduced scope of 2BB-MRY1114; remove redundant information included under 2AM-MRY1325; and indicate how waste management activities particular to 2BB-MRY1114 (i.e. drilling, additional camps, etc.) will be integrated into the 2AM-MRY1325 Waste Management Plan.

Similarly, the QA/QC plan requires updating to include water sampling locations (Section 2.2) that are specific to 2BB-MRY1114. Updates to the Spill Contingency Plan and Abandonment and Restoration (A&R) Plan require updating to reflect the reduced scope of activities under the amended 2BB-MRY1114 as well as the expanded scope proposed in this application to amend 2BB-MRY1114.

Bulk Sampling

7. Water licence 2BB-MRY1114 includes approval of bulk sampling programs, limited to Deposit 1 for a one-year period. NIRB has subsequently indicated that any additional bulk sampling program at Deposit 1 would be subject to another environmental screening (letter from NIRB to BIMC, February 7, 2014). Recognizing that the water licence cannot permit bulk sampling beyond what NIRB has approved, and that no additional bulk sampling has been approved by NIRB, AANDC submits that it is not appropriate for the water licence to include a provision for bulk sampling. In this regard, Baffinland has recognized that necessary approvals will be sought should they consider further advanced exploration requiring a bulk sample (BIMC letter to NIRB, February 12, 2014). AANDC recommends that the licence be amended to remove the reference to bulk sampling so that it does not appear to authorize activities that it actually does not or could not authorize (because of *NWNSRTA* s. 39).

Compliance

8. The compliance review submitted with the application (Appendix 5) summarizes Baffinland's compliance to the existing water licence, 2BB-MRY1114. AANDC recommends that a compliance review also include a review of compliance in regards to inspection reports. This will make it clear to the NWB and interested parties what issues and concerns in the inspection reports have since been addressed and which remain outstanding. For instance, it has not clear in the application whether or not shipments of hazardous waste from Steensby camp have been undertaken and we have not yet received a brief summary of work done to address concerns or deficiencies presented within the September 11, 2013 inspection report (requested in AANDC's November 22, 2013 review regarding 8BC-MRY1314 and required under Part B, Item 6.viii of 2BB-MRY1114).
9. The existing water licence requires Baffinland to submit revised management plans within 30 days from the date of issuance of Amendment 1 (by January 4, 2014). In a letter to the NWB on December 19, 2013, Baffinland requested that the requirement to update the Spill Contingency Plan, Abandonment and Restoration Plan, Quality Assurance/Quality Control Plan, and the Monitoring Plan be deferred until after issuance of the renewed licence. It is noted that revised management plans could not be located on the FTP site and upon further review of the application (Appendices 4 and 5), it is apparent that Baffinland does not intend to submit revisions until after issuance of the application currently being considered. Given that the revised plans remain outstanding (and are considered to be in non-compliance with their current licence) and that existing plans greatly exceed the scope of 2BB-MRY1114, AANDC recommends that Baffinland be required to submit the revised management plans (mentioned above) for approval by the NWB prior to undertaking activities approved either under amendment 1 or the current application to renew and amend 2BB-MRY1114.

Security

10. Section 12.0 of the Project Description asserts that \$1,250,000 is sufficient reclamation security for activities and/or facilities to be conducted or constructed under the renewed licence. It is unrealistic to expect this initial estimate to apply over a 25 year licence period. The licence application commits Baffinland to submitting a proposal for reclamation security increase with notice to the Board (Section 5.8) and to posting additional security prior to proceeding with the establishment of any satellite camps (Section 12.0). The mechanism that appears to be indicated for such security adjustment in the licence is Part B, Item 5, which allows the review and reconciliation of the security amount under Part B, Item 2 of 2BB-MRY1114 in conjunction with the Annual Security Review (ASR) to be conducted under Schedule C of a separate licence (2AM-MRY1325). This is a sound approach, provided that security will be reviewed on a defined period using a transparent and structured process such as is being developed for the Type 'A' licence. AANDC recommends that the renewed licence clearly indicate that the Type 'A' ASR process will be the process in which the Type 'B' security is reviewed annually. However, it remains crucial that developments, activities, and reclamation cost estimates associated with each licence will be clearly distinguished on a licence-by-licence basis, and security will be ordered and furnished in separate instruments for each licence as required.

C. Conclusion

Upon review of Baffinland's application to amend and renew 2BB-MRY1114, the two major issues we would like to raise for the Board's consideration are as follows:

Baffinland is currently not in compliance with licence 2BB-MRY1114 (particularly Part G, Item 1, Part I, Item 1, Part J, Items 1 and 2) with respect to plan updates. Without the updated plans the application does not contain sufficient information to conduct a thorough review.

The current water licence should identify the process for revisiting financial security on an ongoing basis.