



Water Resources
Nunavut Regional Office
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November 22, 2013

Phyllis Beaulieu
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Your file - Votre référence
8BC-MRY1314
Our file - Notre référence
CIDM# 752569

Re: 8BC-MRY1314 - Baffin Iron Mines Corporation – Mary River Site Preparation Project – Cancellation Application

Dear Phyllis Beaulieu:

Aboriginal Affairs and Northern Development Canada (AANDC) has performed a review of Baffinland Iron Mines Corporation's application to cancel Type B Water Licence 8BC-MRY1314 (Mary River Site Preparation Project) submitted to the Nunavut Water Board (NWB) on October 10, 2013. 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* (NWNSTRTA) and the *Department of Indian Affairs and Northern Development Act* (DIAND Act). In conducting our review, AANDC Water Resources referred to the documents on the NWB's FTP-site under 8BC-MRY1314 and 2AM-MRY1325.

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@aadnc-aadnc.gc.ca

Sincerely,

Original Signed By

Jean Allen
Water Management Specialist

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

Technical Review Memorandum

To: Phyllis Beaulieu – Manager of Licensing, Nunavut Water Board

From: Jean Allen – Water Management Specialist, AANDC

Re: 8BC-MRY1314 - Baffin Iron Mines Corporation – Mary River Site Preparation Project - Cancellation Application

A. Background

On May 24, 2013, the Nunavut Water Board (NWB) issued Type B Water Licence 8BC-MRY1314 to Baffinland Iron Mines Corporation (Baffinland) to allow for spring-summer construction activities ultimately required for the Mary River Project while the Type A water licence application was still under review. Baffinland's Type A Water Licence 2AM-MRY1325 was issued by the NWB on June 10, 2013 and approved by the Minister on July 15, 2013. On October 22, 2013, the NWB distributed an application from Baffinland to cancel Type B Water Licence 8BC-MRY1314.

The Mary River Site Preparation Project (Project) is located on Crown and Inuit Owned lands and is located approximately 160 kilometers (km) south of Pond Inlet and 1000 km northwest of Iqaluit. Water licence 8BC-MRY1314 allows the following infrastructure construction and activities:

- Begin development of Quarry Q1 1+100 at Milne Port to generate crushed and screened aggregate for the development of the Milne Port site, and Quarry QMR2 located at the Mary River Mine Site.
- Construct camp facility pads at both the Mary River Mine Site and at the Milne Port site, as well as begin installation of construction camps and associated camp facilities.
- Begin development of two laydown areas (laydowns A and B) at Milne Port for the storage of equipment and supplies being delivered via the summer sealifts.
- Expand existing camp sewage facilities (additional PWSP pond) at Milne Port that will provide additional capacity with respect to the sewage treatment system.
- Expand existing fuel tank secondary containment area at Milne Port.
- Construct one additional 5ML diesel fuel storage tank at Milne Port within the existing secondary containment constructed in 2011 (same construction as the existing 5 ML tank).

Baffinland states that they have reviewed the Type B water licence 8BC-MRY1314 and believe they have no outstanding items. Baffinland states that all abandonment measures prescribed have been superseded by the Type A water licence 2AM-MRY1325. To avoid repetition of security bonding, Baffinland is requesting that the security allocated for 8BC-MRY1314 be returned in the amount of \$122,019.

B. Results of Review

AANDC Water Resources Division offers the following comments/ recommendations for the Board's consideration.

General

1. AANDC recommends that an Annual Report be submitted according to Part B, Item 4 of water licence 8BC-MRY1314 prior to its cancellation (AANDC is particularly interested in the information required in sections a, c, e, f, g, h, I). This summary report will give interested parties, including land owners, a general idea of the status of what was done on site for the duration of the licence term for 8BC-MRY1314 (particularly from the time 8BC-MRY1314 was approved until the time 2AM-MRY1325 was approved).

Management Plans

2. A total of four management plans were updated and approved under water licence 8BC-MRY1314, including the Q1 Quarry Management Plan (March 2013), Quarry Blasting Operations Plan (March 2013), Spill Contingency Plan (March 2013), and the Surface Water and Aquatic Effects Management Plan (March 2013). These plans are located on the FTP site under 8BC-MRY1314 and 2BB-MRY1114 but none are located under 2AM-MRY1325. AANDC recommends to the NWB that these plans also be located under 2AM-MRY1325 to simplify the search for plans referenced in water licence 2AM-MRY1325.
3. It is noted that there may be inconsistencies between the updated plans approved under 8BC-MRY1314 and the original plans approved under 2AM-MRY1325. The Q1 Quarry Management Plan and Borrow Pit and Quarry Management Plan were approved under 2AM-MRY1325 in January 2012 and February 2012 respectively, while updated versions of these same plans were approved under 8BC-MRY1314 in March 2013. The Updated Quarry Blasting Operations Plan was updated to address work to be completed in 2013 and contains an updated protocol for the assessment of acid rock drainage and a blasting management framework, while the updated Q1 Quarry Management Plan contains several updates including quarry volume, changes to assessments of acid rock drainage and drainage management, a site-specific Blasting Operations Management Plan, and a Tote Road Quarry and Borrow pit Sampling Report. While some of the recently submitted quarry plans (P1, Q7, Q11, Q19, D1Q1, D1Q2, etc.) do contain some of these updates, they are intended to be site-specific and may or may not apply to the Q1 Quarry. Likewise, a Borrow Source Management Plan was submitted on October 30, 2013 under 2AM-MRY1325 to supplement the Updated Quarry and Borrow Pit Management Plan submitted in March 2013 and approved under 8BC-MRY1314. AANDC requests

that these updated plans be approved by the NWB under 2AM-MRY1325 so that the new updated plans can continue to be enforced by AANDC inspectors.

Abandonment and Reclamation (A&R)

4. Baffinland stated in their A&R Memo (April 22, 2013) that reclamation will be accomplished according to abandonment and reclamation objectives and criteria outlined in the 2013 Mary River Project Abandonment and Reclamation for Advanced Exploration Activities (January 2013) submitted with the 2012 Annual Report for 2BB-MRY1114. Now that the Type A licence has been approved, Baffinland has proposed that the Preliminary Mine Closure and Reclamation Plan (February 2012) approved under 2AM-MRY1325 become the overriding project document for A&R requirements for all activities associated with the Mary River Project. Given that the cancellation of this licence is not a result of abandonment or closure and that most activities in this Type B licence, including provisions for abandonment or closure, appear to be reflected in the Preliminary Mine Closure and Reclamation Plan approved under the Type A licence, AANDC agrees that reclamation for activities in 8BC-MRY1314 could be accomplished according to Part J of water licence 2AM-MRY1325 and the Preliminary Mine Closure and Reclamation Plan, so long as this plan is revised to include reclamation of laydown areas constructed with crushed ore (refer to No. 7 below).

Compliance

5. According to the Inspection Report for the Mary River Project for water licences 2AM-MRY1325, 2BB-MRY1114, and 8BC-MRY1314 (September 11, 2013), there were no major instances of non-compliance but there are a number of issues where there is a known or anticipated environmental impairment. Deficiencies of greatest concern include proper segregation and disposal of solid waste to ensure diversion of hazardous waste and wildlife attractants from the landfill; and the perceived acceptance of waste from ships for incineration and disposal on site. Section 4.6 of the Waste Management Plan states that the landfill is used for disposal of inert, non-combustible waste only (plastics, cement, sand, used construction materials, scrap metal, pipes, glass, etc.) and that there will be no disposal of food waste, hazardous materials, paper products or biomedical waste in the landfill. Section 4.9 of the same plan states that Baffinland will not accept any type of waste originating from a ship. AANDC is of the opinion that these deficiencies can be addressed under 2AM-MRY1314 but it is recommended that the Licensee submit a brief summary of work done to address concerns or deficiencies listed in the inspection report as it relates to the 8BC-MRY1314 (also required under Part B, Item 4 of 8BC-MRY1314).
6. The Inspection Report referenced above also states that one of the laydown areas was constructed from crushed ore stored at Milne Port. According to the Project Description for 8BC-MRY1314 (submitted with the 8BC-MRY---- application), the laydown areas were to be constructed using quarried material

from the Q1 quarry at Milne Port and no correspondence was received indicating otherwise. According to Part G, Item 1 of 8BC-MRY1314 and 2AM-MRY1325, the Licensee shall notify the NWB in writing of any proposed modification. It is unclear whether the impacts of using crushed ore to construct a laydown area within 31 m from the high water mark of any adjacent water body has been screened under Project Certificate No. 005 and it is unclear whether there is a greater impact associated with using crushed ore as opposed to approved quarry material. AANDC recommends that the 2AM-MRY1325 include more information about the crushed ore (information for ore stockpile is currently under 2BB-MRY1114); that the reclamation plan for the laydown area constructed with crushed ore be included in the Preliminary Mine Closure and Reclamation Plan; and that the potential reclamation liability be considered when calculating the total financial security for 2AM-MRY1325.

Security

7. The Minister of AANDC currently holds security of \$122,019 for water licence 8BC-MRY1314. To avoid repetition of security bonding, Baffinland is requesting that the security allocated for 8BC-MRY1314 be returned. Since the activities under this licence are now also included under 2AM-MRY1325 and thus included in the security estimate for the 2013 Work Plan, AANDC has no objections to returning the security of \$122,019 at such time that the Inspector recommends cancellation of this water licence and the Licensee has submitted a report summarizing all relevant information in Part B, Item 4 of 8BC-MRY1314 as well as the information requested in this memo.