

File: 2AM-MRY1325/G 1 Modification

May 26, 2017

William Bowden, Environmental Superintendent Baffinland Iron Mines Corporation Suite 300 – 2276 Upper Middle Road East Oakville, Ontario, Canada L6H 0C3

Email: william.bowden@baffinland.com

RE: Licence No. 2AM-MRY1325, Type "A" – Modification Request by Baffinland Iron Mines Corporation to Expand the Mary River Mine Site Crusher Pad and Associated Structures

Dear Mr. Bowden:

Background

On April 24, 2017, the Nunavut Water Board (NWB or Board) received from Baffinland Iron Mines Corporation (BIMC or Applicant), a submission seeking permission to expand an existing crusher pad and associated structures, situated at the Mary River Project (Project) Mine Site, in the context of a modification to the Amended Type "A" Water Licence No. 2AM-MRY1325 (Licence), issued to the Project. The submission included the following documents:

- Cover Letter Re: 2017 Mine Site Crusher Pad Expansion (Modification Request) Water Licence 2AM-MRY1325 Amendment No. 1; and
- Attachment # 1: Golder Associates Crusher Pad Expansion Detailed Design Brief, Mary River Project, Nunavut.

According to information contained in the above-referenced submission, the proposed crusher pad expansion, scheduled to be undertaken in May 2017, is intended to increase the size of the pad by 10% (8,350 m²) or the pad' stockpile capacity by 0.134 to 0.2 million tonnes. The expansion it also intended to provide added storage capacity for aggregate used for the Milne Tote Road maintenance work, scheduled for the freshet and freeze up periods. To accommodate the additional surface water that may be generated by the crusher pad expansion, the length of the existing perimeter ditch associated with the crusher pad will be expanded by approximately 270 m.

The Applicant indicated that the volume of the existing sedimentation pond, designed to receive runoff water from the crusher pad through the perimeter ditch, is approximately 3,490 m³. The existing sedimentation pond, design volume is capable of accommodating a 1:10 year, 24-hour storm event, below design high water level. However, with expansion of the crusher pad, the volume of the sedimentation pond required to accommodate a storm event of the same frequency, intensity and duration would be

approximately 3,972 m³. Given the aforementioned, the proponent, indicated that if the volume of the sedimentation pond remains as at 3,490 m³, the facility will only be capable of accommodating between a 1:5 and 1:10 year, 24-hour storm event of specifically outlined intensities.

The proponent stated that during construction activities, appropriate measures, including sediment and erosion control measure, will be developed and implemented to minimize potential impact of the relevant activities on the receiving environment. Further, the proponent mentioned its commitment to conducting daily monitoring of surface water drainage originating from construction areas linked to the proposed activities.

Review

Following receipt of the Applicant's submission, the NWB conducted an internal preliminary review prior to distributing the documents on April 25, 2017, for a fifteen (15) day public review and comment period with the deadline for submissions set for May 10, 2017. Prior to the close of the public review and comment period, a submission was received from Indigenous and Northern Affairs Canada (INAC)¹. INAC in its submission recommended that prior to expansion of the crusher pad, the Applicant should increase the capacity of the sedimentation pond to meet design criteria or the Applicant should justify why the design criteria will not be met and the extent of the increase in risk of uncontrolled discharge of runoff from the pad to the receiving environment. In response, BIMC proposed² a two-part solution to increase, by 0.2 m, the high water level of the sedimentation pond. The first stage, which is temporary and immediate, involves the construction of a low permeability barrier involving sand bags wrapped in geotextile on the existing spillway. The second stage, which will be permanent, involves replacing the sandbags with a raised berm, consistent with the existing sedimentation pond construction. The work involving the second stage will be carried out in summer months when site conditions are expected to be conducive to achieving the desired results.

Part G, Item 1 of the Amended Licence indicates that the following requirements be met in order for an application or request to be considered or carried out as a modification:

- 1. The Licensee may, without written consent from the Board, carry out Modifications provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. Such Modifications do not place the Licensee in contravention of the Licence or the Act;
 - c. Such Modifications are consistent with the NIRB Project Certificate;
 - d. the Board has not, within sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. The Board has not rejected the proposed Modifications

In reference to Part G, Item 1(c) of the Amended Licence terms and conditions mentioned above, the Board requested³ and received written confirmation from the Nunavut Impact Review Board (NIRB) on whether or not the proposed crusher pad expansion is consistent with the scope of the relevant NIRB – issued, Project Certificate No. 005. In response, the NIRB provided correspondence⁴ in which it stated

¹ Indigenous and Northern Affairs Canada (INAC), May 9, 2017.

² Letter and Attachment from BIMC to the NWB, Re: Baffinland Iron Mines Corporation's (Baffinland) response to INAC comments regarding Baffinland's modification request for expanding the Mine Site Crusher Pad under Type "A" Water Licence 2AM-MRY1325 – Amend. No. 1., May 19, 2017.

³ Letter from the Nunavut Water Board (NWB) to the Nunavut Impact Review Board (NIRB), May 16, 2017.

⁴ Letter from the Nunavut Impact Review Board (NIRB) to the Nunavut Water Board (NWB), May 19, 2017.

that the proposed crusher pad expansion and associated activities are apparently not in conflict with the existing terms and conditions contained in the amended Project Certificate No. 005. Further, the NIRB mentioned that the activities proposed were apparently not beyond the scope of the Project as assessed and approved by the NIRB.

The NWB reviewed the Applicant's request, taking into consideration intervener's comments and recommendation, the Applicant's response to intervener' comments and recommendation, the NIRB's determination, potential impact of the proposed activity on the freshwater environment, and the consistency of the proposed activity in relationship to the scope of the Existing Licence. Based on the review, the NWB determined that the nature and extent of the activity proposed by BIMC do not constituted a significant change to the scope of activities captured under the Existing Licence.

Decision

Consequently, by way of this correspondence, the Board authorizes BIMC, under Motion under <u>Motion No. 2017-A1-007</u>, to undertake the proposed activities in the context of a modification provided that the requirements as set out in the Licence are met. The Applicant should note that design drawings for the changes proposed to the sedimentation pond, in response to INAC's recommendation, should be provided for stakeholders' review at least thirty (30) days prior to implementation. Following completion of this authorized modification, the Licensee is required to provide to the Board for review and acceptance, asbuilt plans and drawings pertaining to the modification in accordance with Part G, Item 3 of the Amended Licence.

Further, the Applicant should note that consistent with Part G, Item 2 of the Amended Licence terms and conditions, modifications in excess of that outlined in the Applicant's current submission(s) to the Board, may constitute a separate potential modification or amendment to the Licence, which may require respective evaluation(s) and/or determination(s) by the Nunavut Planning Commission (NPC) and/or the Nunavut Impact Review Board (NIRB) prior to receiving the NWB's consideration or determination.

Should you have any questions, please contact the NWB Licensing Department by email to licensing@nwb-oen.ca or phone at (867) 360-6338.

Regards,

Thomas Kabloona Nunavut Water Board, Chair

Enclosure: NIRB's Determination

INAC-Comments

BIMC's Response to INAC Comments

Cc: Distribution List – Mary River