



Water Resources Division
Nunavut Regional Office
Iqaluit, NU X0A 0H0

Your file - Votre référence
2AM-MRY1325

December 13, 2017

Our file - Notre référence
CIDM#1189813

Stephanie Autut
Executive Director
Nunavut Water Board
Gjoa Haven, NU X0B 1J0

sent via email: stephanie.autut@nwb-oen.ca, licensing@nwb-oen.ca

Re: Information Requests for 2018 Annual Security Review of Baffinland Iron Mines Corporation's 2AM-MRY1325 Type A Water Licence

Dear Ms. Autut,

Thank you for the correspondence on December 5, 2017 providing the schedule and scope of activities to be considered for Baffinland Iron Mines Corporation's 2018 Annual Security Review for their Type A Water Licence 2AM-MRY1325 amendment #1.

Indigenous and Northern Affairs Canada's appreciates the opportunity to formulate information requests, as presented in the enclosed memorandum for the Board's consideration. Comments have been provided pursuant to the Department's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Please do not hesitate to contact me at 867-975-3876 or sarah.forte@aadnc-aadnc.gc.ca for any additional information.

Regards,

Sarah Forté
Water Management Specialist

c.c.: Christopher Murray, Environmental & Regulatory Compliance Manager,
Baffinland
Stephen Williamson Bathory, Director of Department of Major Projects, QIA

Technical Review Memorandum

To: Stephanie Autut, Executive Director, Nunavut Water Board

CC: Christopher Murray, Environmental & Regulatory Compliance Manager,
Baffinland Iron Mines Corporation
Stephen Williamson Bathory, Director of Department of Major Projects, Qikiqtani
Inuit Association

From: Sarah Forté, Water Management Specialist, Indigenous and Northern Affairs
Canada
Wajid Daouda, Senior Engineer, Indigenous and Northern Affairs Canada

Date: December 13, 2017

Re: Information Requests for 2018 Annual Security Review of Baffinland Iron Mines
Corporation's 2AM-MRY1325 Type A Water Licence

Licensee: Baffinland Iron Mines Corporation
Project: Mary River Project
Region: Qikiqtani

A. BACKGROUND

Baffinland Iron Mines Corporation's (Baffinland) Type A water licence 2M-MRY1325 amendment #1 covers mining activities associated with the Mary River iron mine, which has two principal sites, the Mine Site, approximately 100 km inland, and the Milne Port, at the southern tip of Milne Inlet. The licence includes provisions for an annual security review (ASR) to determine security to be posted by Baffinland each year in order to cover the reclamation costs of the project and workplan for the following year.

On November 6, 2017 Baffinland provided their 2018 Work Plan, accompanied by a reclamation cost estimate submitted on November 22, 2017. Discussions and correspondence between the Nunavut Water Board (NWB), the Qikiqtani Inuit Association (QIA), Baffinland, and Indigenous and Northern Affairs Canada (INAC) occurred to ensure the ASR process was amenable to all parties. The process was clarified in correspondence issued by the NWB on December 5, 2017 specifying the schedule for the 2018 ASR as well as the scope of activities to be considered.

This memo is INAC's contribution for the next step in the ASR process, information requests due on December 15, 2017. The first two requests are directed to the NWB and subsequent ones are directed towards Baffinland.

B. RESULTS OF REVIEW

On behalf of the Water Resources Division of INAC, the following information requests are provided for the Board's consideration:

1. Clarification of activities permitted under the present licence – *directed to the NWB*

References:

- RE: Type "A" Water Licence 2AM-MRY1325 – Amendment No.1, Mary River Project; 2018 Annual Security Review Process – General Correspondence Follow-up, Nunavut Water Board, December 5, 2017
- RE: Scope of Activities to Consider for 2018 Annual Security Review of Baffinland Iron Mines Corporation's 2AM-MRY1325 Type A Water Licence, Indigenous and Northern Affairs Canada, December 1, 2017
- 2018 Work Plan, Baffinland Iron Mines Corporation, November 1, 2017
- Nunavut Water Board Licence No. 2AM-MRY1325 – Amendment No. 1, Nunavut Water Board, July 21, 2015

Comment:

INAC is seeking clarification on the inclusion of certain items as Category 1 Items for the 2018 Work Plan in Appendix B. These are items to be considered for the current security review. The fourth paragraph on page 2 of the NWB's correspondence defines *"the scope of the 2017-2018 ASR will be limited to those works/activities in the 2018 Work Plan that have already been approved under Water Licence No. 2AM-MRY1325 (including as amended under Amendment No. 1)"*. Further details are given: *"assessing the reclamation security for works/activities that are yet to be approved and/or those considered to be "out-of-scope" of the current Water Licence ... will remain to be addressed"*. These statements match our understanding of the conclusion of a teleconference held on November 29, 2017 between the Qikiqtani Inuit Association (QIA), the NWB, Baffinland and ourselves.

As presented in our December 1, 2017 letter, INAC is of the opinion that one item included in the category 1 list is not permitted by the licence (#3) and another will require a modification request (#5). The items are included with the qualifier *"NWB and the NIRB will need to sign off on this activity"*. We are unsure of the meaning of this qualifier. We are making the assumption that the qualifier is indicating "sign-off / or approval of".

Information request:

INAC would appreciate if the NWB could please advise:

- 1) If our interpretation of "signing of an activity" is correct.

- 2) If they consider that the proposed building of laydown areas over waterbodies and streams as detailed in item #3 is permitted by water licence 2AM-MRY1325 amendment #1?
- 3) If they consider the expansion of the ore stockpile laydown area at Milne Port as detailed in item #5, and the likely necessary sedimentation pond adjustments, can proceed without a modification request?

2. Mobilization of equipment for activities excluded from the 2018 ASR – directed to the NWB

References:

- RE: Type “A” Water Licence 2AM-MRY1325 – Amendment No.1, Mary River Project; 2018 Annual Security Review Process – General Correspondence Follow-up, Nunavut Water Board, December 5, 2017
- 2018 Work Plan, Baffinland Iron Mines Corporation, November 1, 2017
- 2018 Marginal Closure and Reclamation Financial Security Estimate, Baffinland Iron Mines Corporation, November 16, 2017, Section 3.3.1.7

Comment:

Certain activities of the Workplan have been set aside for the 2018 review because they require licence amendments. The cost estimate includes mobilization of equipment necessary for such activities in Section 3.3.1.7, which specifies “*Bulk material handling modules will not be installed until appropriate approvals are in place*”. The equipment listed includes some parts and machinery needed for work associated with railway construction for Phase 2 of the project.

Information request:

INAC is seeking clarification on if the reclamation estimate for the 2018 ASR should include reclamation (demobilization) costs for equipment brought to site for an activity which has yet to be approved by the Nunavut Planning Commission, the Nunavut Impact Review Board and the NWB.

3. Estimate Breakdown Structure line entries to consider for 2018 ASR – directed to Baffinland

References:

- 2018 Marginal Closure and Reclamation Financial Security Estimate, Baffinland Iron Mines Corporation, November 16, 2017, Appendix A
- 2017 Work Plan – Estimate Breakdown Structure (EBS) – as submitted Nov 24, Baffinland Iron Mines Corporation, November 24, 2016

Comment:

The details of the reclamation estimate are presented in Appendix A using a spreadsheet called Estimate Breakdown Structure (EBS) that includes a column labelled “*Associated Workplan*” specifying the Workplan year for each line item.

In the EBS estimate submitted during the 2017 ASR, entries for the 2017 Workplan were identified as “2017”. In the new 2018 EBS, the identification for these items has changed as there are no longer lines with this label. The two types of entries for 2017 are a few “2017-“ and mostly “2017-A”. The 2018 entries are identified as “2018-R”.

Presumably, since the 2018 EBS was submitted before the NWB defined the scope of this 2018 ASR, it includes items that Baffinland initially presumed would be part of the ASR discussion.

Information request:

INAC would like Baffinland to identify which line items of the 2018 EBS they still believe should be included 2018 ASR. We would also appreciate if they could clarify how 2017 line items were changes and how the 2017 addendum cost estimates were integrated.

4. Updated Interim Closure and Reclamation Plan – *directed to Baffinland*

References:

- 2018 Work Plan, Baffinland Iron Mines Corporation, November 1, 2017, Section 9.3

Comment:

Section 9.3 of the 2018 Work Plan states: “*The updated Interim Closure and Reclamation Plan (ICRP) for the project has been provided as an appendix to this Work Plan. The provision of additional securities for the 2018 Work Plan has not been completed at the time this document was prepared, and will be provided under separate cover.*” Appendix C is labelled as the Interim Closure and Reclamation Plan (BAF-PH1-830-P16-0012), but it was not included in the document circulated by Baffinland and the NWB.

Information request:

INAC seeks to understand:

- 1) What version of the updated ICRP the Work Plan is referring to. The latest version we have seen is revision 4 dated March 31, 2016. If Baffinland is not referring to revision 4 of the ICRP, when will the updated ICRP be shared?
- 2) When the information for the provision of additional securities for the updated ICRP will be provided. This information is critical for the Annual Security Review

since the reclamation cost estimate is based on reclaiming the project as described in the ICRP.

5. Activities planned for addressing acid rock drainage problems at waste rock dump – *directed to Baffinland*

References:

- 2018 Work Plan, Baffinland Iron Mines Corporation, November 1, 2017, Figure A.1
- Phase 1 Waste Rock Management Plan BAF-PH1-830-P16-0029 Rev 1, Baffinland Iron Mines Corporation, November 15, 2017

Comment:

The Work Plan includes an item for waste rock sedimentation pond improvements, which is necessary since Baffinland needs to work actively to address issues with the pond as well as acid rock drainage problems. The revised Waste Rock Management Plan outlines several possibilities for treating runoff from the waste rock including pH adjustments in a pond and high density sludge process inline treatment. We realize that when Baffinland submitted their Workplan, a strategy for dealing with the waste rock sedimentation pond and acid drainage were likely still under development. Since the date for replying to information requests is two months later than when the Plan was submitted, some decisions may have been taken as to which equipment or infrastructure will be used.

Information request:

INAC is requesting information on:

- 1) Which specific line entries in the ASR estimated breakdown structure are for the waste rock sedimentation pond improvements.
- 2) What strategy will be used for addressing the waste rock sedimentation pond leakage and acid rock drainage. Any information available will help reduce the uncertainty in our cost estimate.

6. Accommodations for workers and duration of reclamation – *directed to Baffinland*

References:

- 2018 Marginal Closure and Reclamation Financial Security Estimate, Baffinland Iron Mines Corporation, November 16, 2017, Section 3.3.2

Comment:

The cost estimate states that a marginal increase of 4 979 person-days will be required to complete the additional reclamation activities associated with the 2018 Workplan. Section 3.3.2.2 covers the cost of mobilizing the workers and 3.3.2.3 covers the camp

costs. Specifically: “cost for accommodation and camp operation is assumed to be \$225.50/person-day and includes camp maintenance, catering, housekeeping, and fuel costs.”

Information request:

INAC requests more information on:

- 1) The total estimated duration of reclamation activities, and whether the work is planned only over summer seasons or year-round.
- 2) If the cost for accommodation includes the mobilization and de-mobilization of a camp for workers, what size camp is budgeted for and how many workers are budgeted for.

7. Proposed haul road re-alignment at Milne Port – *directed to Baffinland*

References:

- 2018 Work Plan, Baffinland Iron Mines Corporation, November 1, 2017, Figure A.1

Comment:

Figure A.1 of the 2018 Work Plan includes a proposed haul road re-alignment to the west of proposed laydown area which does not link up with the present haul road.

Information request:

INAC would appreciate sufficient information for us to understand how this proposed road re-alignment could be used.

8. Mine truck shop – *directed to Baffinland*

Information request:

In the event it is confirmed that the construction of a new mine truck shop will start in year 2018, we would request Baffinland to provide us with any relevant feasibility, pre-design report and construction drawings.