



Richard Dwyer
Manager of Licensing
Nunavut Water Board
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Re: Requested information and Response to Qikiqtani Inuit Association's (QIA) in support of the Annual Security Review for Baffinland Iron Mines Corporation's 2024 Work Plan for the Mary River Project, Water Licence 2AM-MRY1325 Amendment No. 1

Dear Mr. Dwyer,

Baffinland would like to thank the QIA for their review of the 2024 Work Plan for the Mary River Project and the associated input they have provided regarding the 2024 Annual Security Review. Baffinland would like to take this opportunity to provide comment on the QIA's proposed approach to the 2024 Security Amount. In their February 26, 2024 submission to the Nunavut Water Board (NWB), QIA recommended a global estimate value of \$156,686,500 million for 2024.

Baffinland has been proactively engaging with the QIA and Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) regarding specific technical issues. The Waste Rock Facility (WRF) and associated cover have been a significant topic of discussion. To further assist QIA and NWB with their review, Baffinland would like to address several items they have commented on within their review:

#### 1. Reclamation Studies

As requested in QIA's submission, Baffinland is planning to conduct the following studies in 2024:

- Pit-wall stability and geochemical analysis
- WRF cover system modelling: Thermal modelling of the WRF active zone accounting for climate change projections from Environment and Climate Change Canada
- Water quality modelling: Long-term water quality modelling to demonstrate successful closure is on track to match prediction.

### 2. Waste Rock Facility Cover

Baffinland has proposed to undertake a progressive reclamation and monitoring program on the WRF. Baffinland has attached the updated Phase I Waste Rock Management Plan (Attachment 1), which summarizes the proposed approach to managing the WRF and provides context regarding planned progressive reclamation of the WRF. Baffinland is committed to completing progressive reclamation of the WRF through installation of a 4.0



March 26, 2024

m cover of Non-AG waste over exposed PAG waste, with the objective of achieving and maintaining an active PAG waste footprint of 15 % by the end of 2024.

As outlined in the QAQC Monitoring Plan (Appendix B of Attachment 1), Baffinland will share the results of this progressive reclamation in a quarterly report. This report will also include details on any corrective actions and exceedances of the applicable regulatory requirement or trigger levels, should they occur. Furthermore, Baffinland will provide the following documentation to regulators:

- Drawings stamped by a NAPEG registered engineer showing the extents and design details of the Non-AG cover over the WRF, and the area of exposed PAG waste remaining to be covered.
- Records supporting in-pit material identification and WRF placement.
- Next 3-months material placement plan, highlighting planned changes in percent PAG exposure.

#### 3. Inflation Rates

Baffinland notes QIA's comment regarding the differences between the Canadian national average rate for inflation and the Nunavut Territorial rate. Baffinland believes given the project is in Nunavut, the Nunavut rate is appropriate.

Baffinland is planning to update the Global Estimate, based on acceptance of the new security model developed for the ASR. At this time, we would apply new unit rates that take into account inflation to the Global Estimate.

# 4. Stabilization of Pit Walls

There is currently one phase wall at the Mary River Mine due to the location of the resource and advancement in mining. The wall is designed for stability during operations. The wall is stable from a safety perspective and is inspected by WSCC representatives and third-party engineer annually. Furthermore, Baffinland conducts annual geotechnical studies to confirm stability of the wall and we are planning to conduct geochemical studies in the near future.

As outlined under response 1, pit-wall stability will be assessed. At this time, due to ongoing geotechnical studies on the existing wall, this item does not represent a risk to the current operation and should not be carried in the security estimate.

# 5. Water Quality Modelling

Baffinland is committed to conducting long-term water quality modelling, as outlined in response 1. Baffinland acknowledges QIA's comment on the water quality monitoring. Long-term water quality predictions will be used to assess requirements for long-term water quality monitoring and treatment periods. As such, Baffinland proposes to review the water quality monitoring and treatment period once the modelling results are available.



We hope this provided information and clarifications are adequate and can assist the NWB and QIA with their review.

Regards,

Elisabeth Luther

Senior Manager, Regulatory Affairs

Cc: Lou Kamermans (Baffinland), Chris Spencer (QIA), Conor Goddard (QIA)

Attachments

Attachment 1. Phase I Waste Rock Facility Management Plan