



November 25, 2019

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Sent via email: info@nirb.ca

RE: Baffinland Response to Comments on the NIRBs 2018-2019 Annual Monitoring Report and Board Recommendations for Project Certificate No. 005 for the Mary River Project

Baffinland Iron Mines Corporation (Baffinland) has reviewed the comments and recommendations received from the Nunavut Impact Review Board (NIRB) in regard to the 2018-2019 Annual Monitoring Report (the NIRB Report) for Baffinland's Mary River Project (the Project). Baffinland's responses to the comments and recommendations are provided in Attachment 1 of this letter. In addition to Board Recommendation Nos. 1 to 8, Baffinland notes that two additional information requests were included in Section 4 of the NIRB Report, seeking an update on 2018 Reportable Spills and 'Terrain Stability' Issues within 30 days. Subsequently, Baffinland has included responses to these information requests in Attachment 1 as well.

In reviewing the comments and recommendations Baffinland has identified several statements it believes to be inaccurate portrayals of what was included in our 2018 Annual Report to the NIRB. There are also some elements that require further clarification from the NIRB. Corrections on statements provided in the NIRB report are captured below in Bullets 1-4, and it is Baffinland's request that following further consideration by the NIRB and if found to be appropriate an amended 2018-2019 Annual Monitoring Report be re-issued. Bullets 5 and 6 identify the two elements of the NIRB Report where Baffinland is requesting additional clarification from the NIRB.

Baffinland appreciates the active role the NIRB and its staff take in the monitoring of the Mary River Project and the subsequent recommendations provided to ensure full compliance with the Terms and Condition of Project Certificate No. 005.

1. Comparison to FEIS/Amendment Predictions

In Section 2.3.18 of the NIRB Report, the NIRB notes that Baffinland:

"has not fully and consistently reported on how the current environmental and socio-economic effects of the Mary River Project compare to the impacts as predicted in the FEIS, ERP and the Production increase for most of the key ecosystemic and socio-economic parameters associated with the Project..."

Baffinland acknowledges the request from NIRB to better integrate these impact evaluations within the PC Condition summaries and will consider this recommendation for future reporting years.



For clarity, Baffinland wishes to advise the NIRB that as described in Section 4.4 of the 2018 Annual Report, and in accordance with Item 12 of the Project Certificate, Baffinland has included a summary of Project effects relative to FEIS prediction in Section 4.5 through 4.7 by providing a qualitative summary of impact evaluations. The impact evaluations are then substantiated by the reporting on each PC Condition that follows, including a trends analysis where available for year over year comparisons. Where relevant, reference to VEC/VSEC specific monitoring reports, that are available publically on Baffinland's Document Portal and shared with relevant regulators and or working group members, are included within the PC Condition summaries to aid the reader in easily sourcing additional information on conclusions summarized in impact evaluations.

In relation to the 2019 report, impact evaluations can be located in the following tables of the report:

Atmospheric Environment Monitoring

- Climate Impact Evaluation: Table 4.4 (page 32)
- Air Quality Impact Evaluation: Table 4.6 (page 43 - 44)
- Noise and Vibration Impact Evaluation: Table 4.8 (page 55)

Freshwater Monitoring

- Hydrology and Hydrogeology Impact Evaluation: Table 4.12 (page 66)
- Groundwater and Surface Water Impact Evaluation: Table 4.13 (page 75 - 76)
- Freshwater Impact Evaluation: Table 4.17 (page 121)

Terrestrial Environment and Bird Monitoring

- Vegetation Impact Evaluation: Table 4.15 (page 98)
- Terrestrial Impact Evaluation: Table 4.18 (page 139)
- Bird Impact Evaluation: Table 4.20 (page 177)

Marine Environment and Seabird Monitoring

- Marine Environment Impact Evaluation: Table 4.22 (page 201)
- Marine Mammal Impact Evaluation: Table 4.25 (page 251)

Socio-Economic Monitoring

- Population Demographics Impact Evaluation: Table 4.27 (page 318)
- Education and Training Impact Evaluation: Table 4.32 (page 337)
- Livelihood Employment Impact Evaluation: Table 4.36 (page 354)
- Economic Development Impact Evaluation: Table 4.38 (page 364 - 365)
- Human Health and Well-being Impact Evaluation: Table 4.39 (page 376)
- Culture Resource and Land Use Impact Evaluation: Table 4.46 (page 399 - 400)
- Benefits, Royalties and Taxation Impact Evaluation: Table 4.52 (page 415)

Should the NIRB feel that further modifications would support the readability of the report, Baffinland would like to engage directly with NIRB staff to understand how future revisions could better aid in the reporting on the comparisons to impact predictions.

2. 2018 Narwhal Abundance

Under Sections 2.3.1.7 (pg. 15), NIRB reported that Baffinland had provided the following responses to comments received from the World Wildlife Fund (WWF) on Baffinland's 2018 Annual Report:



“...Baffinland acknowledged that the reported narwhal abundance in 2018 may not be temporary, and has scaled up their monitoring in 2019 in order to evaluate the observed change” (emphasis added).

The response that was actually provided by Baffinland to WWF clearly states the following:

*“Baffinland acknowledges comments from Inuit regarding a lack of narwhal in the RSA (Regional Study Area) during 2018, and is responding by increasing the level of monitoring undertaken in 2019 to evaluate this observed change. **Project monitoring has not detected any adverse behavioural effects on narwhal** (i.e. large scale displacement or abandonment) from shipping beyond those predicted in the environmental assessment. This is in light of a continuous year-to-year increase in ship traffic in the RSA since the start of Project operations...” (emphasis added).*

It appears the NIRB has misinterpreted the response provided by Baffinland, and more importantly, the results of Project monitoring within the NIRB Report. Baffinland notes that despite no measured indication of changes in narwhal abundance in effects monitoring to-date, increased monitoring was undertaken in 2019 to respond to Inuit concerns.

Baffinland is deeply concerned that the above mischaracterization of effects monitoring results may unduly affect interested parties understanding of Project effects to-date and create overstated concerns about Project effects on the environment, and narwhal abundance within the RSA.

3. Groundwater Monitoring vs Surface Water Monitoring Results

Baffinland would like to clarify incorrect references provided by NIRB in their Report on both groundwater and surface water results as presented in Baffinland’s 2018 NIRB Annual Report. To clarify the Board’s interpretation of the results, Baffinland has outlined the corrections below.

The NIRB provided the following comments on Board Recommendation No. 6:

“In the 2018 Annual Monitoring Report, Baffinland indicated that a groundwater monitoring program was implemented at various Mine Site locations and select water samples collected downstream of active quarries showed elevated levels of ammonia and nitrate levels when compared to baseline measurements”.

The information referenced in the above comment refers to surface water run-off results, not groundwater results. As described in Section 4.6.4 (page 77) of the Annual Report to NIRB,

“During 2018, surface water runoff downstream of active quarries and mining areas were monitored for the water quality parameters outlined by the Type A Water Licence, including parameters related to explosives residue, such as ammonia and nitrate. Although select water samples collected downstream of active quarries and



mining areas showed elevated ammonia and nitrate levels in comparison to baseline concentrations, the majority of samples were below the established Canadian Council of Ministers of the Environment (CCME) water quality guidelines for ammonia and nitrate (CCME, 2010; CCME, 2012)".

In reference to the 2018 groundwater results, there was no indication of elevated ammonia or nitrate, nor was the groundwater program undertaken at active quarries and mining areas. The methodology for the 2018 groundwater monitoring program is also detailed in the 2018 QIA & NWB Annual Report for Operations.

4. Reportable Spills

Under Section 4 (pg. 19) of the NIRB Report, NIRB cited the following:

*"As noted in the 2018 Annual Report, Baffinland stated had (sic.) several exceedances in their effluent from fuel storage run-off areas, the Waste Rock Facility and several other large sewage and fuel related spills outlined in Table 4.3 of their 2018 Annual Report. Baffinland stated when it reported these **44** reportable items..." (emphasis added).*

For clarity, Baffinland reported a total of 36 spills under Section 4.5.2 of the Annual Report to the NIRB, including twenty-three (23) sewage/greywater spills, four (4) sediment releases and nine (9) spills involving other operational effluents and materials.

5. Requirement for Cross-Cultural Training

In accordance with Board Recommendation No. 8, the NIRB has requested Baffinland provide a detailed description of cross-cultural training programs delivered on-site. Baffinland appreciates the concerns raised by the NIRB in their supporting comments for Board Recommendation No. 8 and the intent of the Recommendation, however, Baffinland wishes to clarify that the delivery of cross-cultural training is not a requirement of Project Certificate No. 005 and wishes to better understand the regulatory basis under which the NIRB is requiring the information requested in Board Recommendation No. 8.

Baffinland notes that despite not being required by Project Certificate No. 005, cross-cultural training does occur on-site. Details have been provided to the Board in response to the Recommendation No. 8 (see Attachment 1).

6. NIRB Assigned Status of Compliance

Baffinland notes that within the NIRB Report, the status of compliance assigned by NIRB has regressed on several terms and conditions. It is not clear to Baffinland based on the supporting rationale provided by NIRB why this regression has occurred.



With the aim of seeking further clarity on the methodology deployed by NIRB and the supporting rationale for the change in status of compliance, Baffinland would like to further understand the methodology employed by the NIRB for the 2018-2019 reporting year. To facilitate further discussion on this subject Baffinland will provide an updated analysis of the modified compliance designations at a later date.

Should you have any questions or comments on the aforementioned items raised by Baffinland or responses to the Board Recommendations below, please do not hesitate to contact the undersigned.

Regards,

Lou Kamermans
Director, Sustainable Development
Baffinland Iron Mines Corporation

Attachments:

- Attachment 1: Baffinland Response to Board Recommendations
- Attachment 2: Summary of 2018 Reportable Spills
- Attachment 3: 2014 Tetra Tech Tote Road and Borrow Source Evaluation
- Attachment 4: Dust Stop Trial Summary
- Attachment 5: Summary of Corrective Actions and Correspondence with DFO
- Attachment 6: EWI November 2019 Update
- Attachment 7: SOP for Caribou Tissue Sampling
- Attachment 8: Methodology for 2018 Groundwater Monitoring Program
- Attachment 9: Landfill Enclosure Design and Completion Photos
- Attachment 10: Cross-Cultural Training Summary Report

Cc: Ryan Barry, Tara Arko, Cory Barker (Nunavut Impact Review Board)
Megan Lord-Hoyle, Emma Malcolm, Genevieve Morinville, Connor Devereaux, Christopher Murray, Amanda McKenzie (Baffinland)