

- Dust Management and Monitoring Plan (Condition 10)
- Sediment Erosion and Management Plan (Condition 22, 26 and 43)
- Groundwater Monitoring and Management Plan (Condition 23)

Additional Geotechnical Investigations

Project Certificate [No. 005] Condition 25 requires that the results of additional geotechnical investigations be submitted to the NIRB at least 60 days prior to the commencement of construction activities. The NIRB has not received this information to date. As these details may result in modifications to Project engineering design and would also inform the implementation of mitigation measures to minimize potential impacts of the Project, receipt of the information is essential at this time.

Recommendation 2: The Board requests that Baffinland provide outstanding information on additional geotechnical investigations that were to be undertaken prior to the commencement of construction activities within 30 days' receipt of these recommendations.

Progressive Revegetation Program

Project Certificate [No. 005] Condition 39 requires that the Proponent develop a progressive revegetation program for disturbed areas which are not required for operations. Information on the progressive revegetation program has not been submitted to the NIRB although the Project Certificate specifies that this information be provided to the NIRB for review and comment at least 60 days prior to the commencement of construction activities.

Recommendation 3: The Board requests that Baffinland submit the outstanding details of its progressive revegetation program to the NIRB within 30 days' receipt of these recommendations.

Blasting Mitigation Measures

Project Certificate [No. 005] Conditions 116 and 118 require that the Proponent develop appropriate mitigation measures to minimize the effects of blasting on marine fish and fish habitat, including the incorporation of thresholds for the use of specific mitigation measures to limit such disturbances. The Project Certificate specifies that these Conditions are to be met prior to construction; however the information on mitigation measures to minimize the effects of blasting on marine fish and fish habitat as well as thresholds for the use of specific mitigation measures to prevent or limit disturbance to marine wildlife has not been submitted to the NIRB.

Recommendation 4: The Board requests that Baffinland submit the information on mitigation measures to minimize the effects of blasting on marine fish and fish habitat as well as thresholds for the use of specific mitigation measures to prevent or limit disturbance to marine wildlife and that this information is provided within 30 days' receipt of these recommendations.

Labour Market Analysis

Project Certificate [No. 005] Condition 139 requires that Baffinland undertake a detailed labour market analysis and that the results of this analysis be provided to the NIRB prior to the commencement of construction activities. The NIRB has not received this analysis to date.

Recommendation 5: The Board requests that Baffinland submit the results of the detailed labour market analysis as required by Condition 139 to the NIRB within 30 days' receipt of these recommendations.

Air Quality Monitoring

Project Certificate [No. 005] Condition 8 requires that air quality monitoring be performed at the mine site and Steensby Inlet Port to demonstrate that pollutant emissions are within predicted levels. Air quality monitoring stations were not in place during the NIRB's 2013 site visit.

Recommendation 6: The Board requires that Baffinland set up air quality monitoring stations and conduct analyses of air quality to ensure that the mitigation measures are in place and are achieving their objectives. The Board requests that Baffinland provide photographs and a description of the monitoring stations and locations where each monitoring station has been installed, as well as a description of the protocols and procedures for air quality sampling and analysis. The Board requests that this information is provided within 60 days' receipt of these recommendations.

Bird Deterrents

Project Certificate [No. 005] Condition 68 requires that the Proponent install flashing red, red strobe or white strobe lights and guy-wire deterrents on communication towers. It was noted that these deterrents were not in place at the time of the NIRB's 2013 site visit.

Recommendation 7: The Board requests that Baffinland install lights and/or guy-wire deterrents on communication towers within 60 days' receipt of the Board's recommendations and that it provide follow up photos which detail how and where such deterrents have been installed to the NIRB within 90 days' receipt of these recommendations.

Marine-based Fuel Prevention

Project Certificate [No. 005] Condition 173 requires the employment of full containment booms during all ship-to-shore and other marine-based fuel transfer events. During the NIRB's 2013 site visit it was noted that full containment booms were not employed during marine-based fuel transfer events.

Recommendation 8: The Board requests that Baffinland provide a detailed description of methods employed to protect the marine environment during marine fuel transfer events, describe its previous and current compliance to Condition 173, and discuss the use of full containment booms employed at other mine sites and/or during major marine re-fuelling activities in Nunavut (i.e. community fuel re-supply).

The Board requests that Baffinland provide this information regarding compliance with Condition 173 within 60 days' receipt of these recommendations.

Fuel Storage Facilities

During the NIRB's 2013 site visit, a significant amount of pooled water was observed at the fuel storage facilities at the Mary River mine site and Milne Port. The fuel storage facility at Milne Port was under construction at the time of the visit. Evidence of fuel leakage was observed at both sites.

Recommendation 9: Although there are no specific terms and conditions regarding the regular operation and maintenance of fuel storage facilities, the Board requests that Baffinland employ best practices in the operation and maintenance of fuel storage facilities in order to limit and mitigate potential impacts to the surrounding environment. Fuel storage facilities should be maintained so as to limit the amount of contact water that is produced. The Board requests that Baffinland provide a plan of action to reduce the volume of contact water in fuel storage facilities as well as provide a report on any instances of fuel leakage at site and instances of malfunction at the facilities which are either ongoing or which have been addressed.

The Board requests that Baffinland submit its plan of action and report to the NIRB within 60 days' receipt of these recommendations.

The Board respectfully requests that all recommendations requiring follow-up action by the Proponent be provided within the stipulated timelines. Should you require additional time to meet the requirements as requested, please contact our office to propose a timeline for submission.

Should you have any questions or require further clarification related to these recommendations or to the NIRB's monitoring of the Mary River project, please do not hesitate to contact me directly at (867) 983-4609 or jdhillon@nirb.ca.

Sincerely,

Original signed by:

Jaswir Dhillon, M.Eng, P.Eng
Technical Advisor & Mary River Project Monitoring Officer
Nunavut Impact Review Board

cc: Erik Madsen, Baffinland Iron Mines Corp.
Mary River Distribution List

Enclosure: The Nunavut Impact Review Board's 2012 – 2013 *Annual Monitoring Report for Baffinland Iron Mines Corp.'s Mary River Project (November 2013)*