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November 25, 2020

Megan Lord-Hoyle  
Director, Sustainable Development  
Baffinland Iron Mines Corporation  
2275, Upper Middle Road East  
Oakville, ON L6H 0C3

Sent via email: [megan.lord-hoyle@baffinland.com](mailto:megan.lord-hoyle@baffinland.com)

**Re: 2020 Marine Monitoring and Marine Mitigation Workshop Report for the Mary River Project and NIRB's Recommendations**

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Dear Megan Lord-Hoyle:

The Nunavut Impact Review Board (NIRB or Board) is hereby releasing its *2020 Marine Monitoring and Marine Mitigation Workshop Report for Baffinland Iron Mines Corporation's Mary River Project* (the Report) which includes the Board's Recommendations for the 2021 shipping season. The enclosed Report provides the record of public concerns, questions, and comments raised during the Marine Monitoring and Marine Mitigation Workshop (the Workshop) held in Pond Inlet on August 25, 2020. The Board has issued the following recommendations to assist Baffinland Iron Mine Corporation (Baffinland or Proponent) in addressing concerns related to project-shipping and impacts around marine mammals. The Board's recommendations are based on the feedback received from community members and the gaps identified by the NIRB during the Workshop, which need to be addressed prior to the commencement of the 2021 shipping season and in the ongoing monitoring of the approved Mary River Project (the Project).

**Ballast Water Exchange and Invasive Species**

During the Workshop, the Mittimatalik Hunters and Trappers Organization and the Qikiqtani Inuit Association posed several questions to Baffinland regarding the effectiveness of the ballast water treatment system onboard its ore transportation vessels and noted the potential for introduction of invasive species into the marine environment. Baffinland indicated that every ore carrier that enters into the port at Milne Inlet performs a salinity test on a random ballast tank; if the test shows the salinity level is below 30 parts per thousand then the ship is required to travel to Baffin Bay to perform another exchange and re-test. Unfortunately, in 2020 due to COVID-19, Baffinland was unable to begin biological monitoring due to restricted access to vessels; however, they plan to initiate biological monitoring in the 2021 shipping season.

World Wildlife Fund submitted during the Technical Meeting that several Project vessels used by Baffinland in 2019 did not treat ballast water raising the risk of accidental release of invasive species, and the NIRB notes that in Baffinland's 2019 Annual Report for the Mary River Project there was indication that a potentially invasive species "Marenzelleria viridis" (a mudflat worm found normally in southern Canada and overseas) was identified in Milne Port and that further analysis was required to determine next steps.

The Board has heard many comments from communities and parties throughout the reconsideration and monitoring processes related to Baffinland's annual shipping and that ships may not be equipped with the appropriate treatment systems for removing potentially invasive species. While the Board understands and is aware of the limitations that COVID-19 brings to ongoing monitoring programs of approved Project, the NIRB reminds the Proponent that it is still responsible for the treatment of ballast water as required in the Project Certificate.

**Recommendation 1:** The Board requests that the Proponent provide an update regarding how many vessels contracted by Baffinland in 2020 monitored for high salinity levels and identify all ballast water exchange locations. Further, the Board directs Baffinland to report the status of any new species detected or identified through the Aquatic Invasive Species Monitoring program to the community of Pond Inlet as well as Marine Environmental Working Group members.

It is requested that this update be provided within 30 days to the NIRB and included within the 2021 Annual Reports to the NIRB moving forward.

### **Population and health status of fish and marine mammals**

Community members expressed concerns during the Workshop regarding potential declines in narwhal and seal populations which may be attributed to Baffinland's increased shipping activities, influence of underwater noise from additional ore carriers, and installation of passive acoustic devices in the marine environment. The Mittimatalik Hunters and Trappers Organization also indicated that many hunters have reported seeing health changes in fish and marine mammals and have observed lesions in liver and blubber as well as cuts on the skin and flaps of marine mammals harvested from the area.

**Recommendation 2:** The Board requests that Baffinland prepare a memo within 60 days summarizing the data currently available on marine mammal health through the marine mammal monitoring program.

### **Dust**

During the Workshop, community members expressed concerns about dust deposition and accumulation on sea ice. Several community members expressed concern that impacts have not been properly monitored and mitigated related to dust on sea ice and the impacts to marine mammals. While the Proponent acknowledged that most of the dust deposition around Milne Inlet is caused by blowing dust from ore stockpiling, Term and Condition 21 of the Project Certificate directs the establishment of thresholds for aquatic systems around Milne Port. Baffinland has indicated that it will be applying a suppressant to the ore stockpiles to reduce dust emissions from the ore stockpile in Milne Inlet during the next monitoring year and the Board would like further

information regarding Baffinland's ore stockpile dust control strategy. Further, this Recommendation is being proposed in conjunction with the items discussed in the NIRB's 2019-2020 Annual Monitoring Report for Baffinland's Mary River Project.

**Recommendation 3:** The Board requests that within 30 days Baffinland submit information about the technology to be used to suppress dust on the ore stock pile and include specific notes on the operating conditions for best performance and if seasonality will impact application and performance. Details should also include how data will be collected to determine success of the program (i.e., dust study) and if visual comparisons will be tracked along with weather-related events.

Further, Baffinland is required to report the results of this ore stockpile dust trail/experiment as part of its annual reporting requirements.

The Board respectfully requests that for items requiring follow-up action by Baffinland that a response be provided within the timeline as requested for each of the recommendations. Should you have any questions or require further clarification regarding the Board's recommendations or the NIRB's monitoring program for the Mary River project, please contact the undersigned directly at [cbarker@nirb.ca](mailto:cbarker@nirb.ca) or Solomon Amuno at [samuno@nirb.ca](mailto:samuno@nirb.ca).

Sincerely,



Cory Barker, M.Sc.  
Technical Advisor I  
Nunavut Impact Review Board

cc: Lou Kamermans, Baffinland Iron Mines Corp.  
Mary River Distribution List

Enclosure (1): The Nunavut Impact Review Board's *2020 Marine Monitoring and Marine Mitigation Workshop Report*