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September 30, 2020

Karen D. Costello  
Executive Director  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU  
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Via e-mail: [info@nirb.ca](mailto:info@nirb.ca)

**Re: Government of Canada Comments on Commitment List for Baffinland Iron Mines Ltd. "Phase 2 Development" Proposal**

Dear Ms. Costello,

Thank you for your letter dated September 23, 2020, requesting parties in attendance of the Baffinland Iron Mines Ltd. "Phase 2 Development" Technical Meeting to provide confirmation of commitments as worded by the proponent, and indicate outstanding unresolved issues. The Canadian Northern Economic Development Agency's Northern Projects Management Office (NPMO), on behalf of federal departments, is providing comments on Baffinland Iron Mine Corporation's (BIMC) commitment table. Please see below the Government of Canada's proposed modifications. A summary of proposed changes and unresolved issues is included in this letter.

Transport Canada (TC), Natural Resources Canada (NRCan), and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) do not have any proposed changes to the commitment wording provided by the proponent for their respective commitments. At this point, these departments do not have any unresolved issues.

Health Canada (HC) has proposed modifications to the wording provided for commitments HC-FC-01 and HC-FC-02. The suggested wording has been agreed to by the proponent under previously shared commitments with Environment and Climate Change Canada (ECCC-FC1, ECCC-FC2, and ECCC-FC3). While clarifications are proposed to several of those commitments, HC would like to maintain the current language and spirit of the previously accepted commitments. HC has no unresolved issues, contingent upon the proponent's acceptance of these suggested edits.

Environment and Climate Change Canada (ECCC) has proposed modifications to the wording provided for commitment ECCC-FC4/ECCC-1 NEW which combines wording from previous versions of the commitment. ECCC will also be seeking more detailed commitment language from the Proponent regarding air quality monitoring and mitigation for commitment ECCC-FC1/ECCC-FC3. ECCC considers these two issues as resolved, pending additional input from BIM as agreed.

Parks Canada (PCA) does not have any comments on commitment wording at this time. Commitments PCA-02, PCA-03 and PCA-04a, b, and c are still considered unresolved. PCA also notes that PCA-03 and PCA-04a were not included on the commitment list that BIMC provided, but remain outstanding. Resolution of these issues is in progress pending resolution of the commitments DFO 3.4 NEW series, DFO 3.5 NEW, DFO 3.7 NEW, and DFO 3.6.6 NEW. All other issues are resolved.

Since the final public hearing was adjourned in November 2019, Fisheries and Oceans Canada (DFO) has submitted updated technical comments based on updated information provided by BIMC in January 2020. DFO's Updated Technical Comments consolidated outstanding issues in the September 23, 2019 Final Submission for further resolution and incorporated the updated information provided by BIMC, who suggested modifications to the nomenclature for recommendations and created new recommendations indicated by the naming convention DFO X.X.X NEW.

DFO is still working with the Proponent to address outstanding concerns. As such, DFO is proposing changes to several commitments at this time, including DFO 3.4.1 NEW, DFO 3.4.2 NEW, DFO 3.4.3 NEW, DFO 3.4.4 NEW, DFO 3.5 NEW, DFO 3.6.6 NEW, and DFO 3.7 NEW. DFO notes that recommendations DFO 3.4.2 NEW, DFO 3.4.4 NEW, and DFO 3.7 NEW have been added to the commitment table, as these were absent from the proponent's commitment list, but remain outstanding issues. DFO anticipates providing final wording after the pre-hearing conference and prior to the final hearing. These issues (seven in total) are considered unresolved at this time. All other issues are resolved.

The Government of Canada looks forward to continued participation in the Board's reconsideration process. If you have any questions or concerns, please contact Saba Qazi, Senior Project Manager, NPMO, at [saba.qazi@canada.ca](mailto:saba.qazi@canada.ca), (867) 975-1945.

Sincerely,



Adrian Paradis  
Acting Director General  
Northern Projects Management Office

c.

Krista Henriksen, Nunavut Regional Director General, Crown-Indigenous Relations and Northern Affairs Canada

Mark Hopkins, Director General, Crown-Indigenous Relations and Northern Affairs Canada

Mary Taylor, Environmental Protection Operations Directorate, Environment and Climate Change Canada

Tom Hoggarth, Director General, Ecosystems Management, Fisheries and Oceans Canada, Central and Arctic Region

Chantal Roberge, Director, Environmental Health and Internationally Protected Persons,  
Health Canada

Patrick O'Neill, Director General, Explosives, Safety and Security Branch, Natural  
Resources Canada

Jenna Boon, Field Unit Superintendent, Nunavut, Parks Canada Agency

Shari Currie, Regional Director General, Prairie and Northern Region, Transport Canada

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
CIRNAC-01 NEW	Freshwater Environment	3 - September 2020 - Technical Meetings	<p>CIRNAC requests that Baffinland commits to the providing the following information during the Water Licence Amendment process, subject to Nunavut Water Board requirements.</p> <p>i. Baffinland shall provide a heat balance and relationship of the heat generation associated with the exothermic reaction of PAG waste rock deposited and soluble sulphates and demonstrate that the current design of the waste rock facility will maintain permafrost conditions in the long term (closure and beyond).</p> <p>ii. Baffinland shall perform an oxygen balance of the waste rock facility and correlate it with soluble sulphates. This will provide understanding of the process of ARD generation and the performance of the waste rock facility.</p>	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license
CIRNAC-01a NEW	Terrestrial Environment	3 - September 2020 - Technical Meetings	<p>Baffinland shall develop a detailed site program to monitor the thaw consolidation and soil deformation under the structures/embankments constructed as part of the Phase 2 Project. The monitoring results shall be compared with the Final Environmental Impact Statement Addendum predictions and appropriate mitigation measures shall be identified and incorporated into the adaptive management approach.</p>	NA	This commitment will be implemented post PC approval
CIRNAC-03 NEW	Freshwater Environment	3 - September 2020 - Technical Meetings	<p>CIRNAC requests that Baffinland commits to the providing the following information during the Water Licence Amendment process, subject to Nunavut Water Board requirements.</p> <p>i. Baffinland shall develop reliable criteria for identification of PAG rock that clearly accounts for uncertainty in the 0.2% total sulphur threshold and the presence of acidic soluble sulphates upon projected life of mine tonnages of PAG and Non-Acid Generating (NAG) rock.</p> <p>ii. Baffinland shall incorporate these criteria, clearly stated ranges in projected life of mine PAG and NAG rock tonnages and the resultant necessary contingencies and methods of validation that need to be incorporated into engineering design, environmental monitoring and management strategies for the Waste Rock Management Plan and Interim Closure and Reclamation Plan. These documents are to be submitted for review during the Water Licence Amendment process, subject to Nunavut Water Board requirements.</p> <p>iii. Baffinland shall review the performance of these plans and provide evidence of the effectiveness of these plans by demonstrating compliance with the management measures and that the desired outcomes of mitigation are achieved on an annual basis.</p>	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license

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DFO-3.6.4 DFO-3.6.6	Marine Environment	3 - September 2020 - Technical Meetings	Baffinland and DFO will provide an update on DFO Comment 3.6.4 and 3.6.6 following bilateral discussions	On or before October 16, 2020	Update will be provided during the Community Roundtable
ECCC-3 NEW ECCC-4 NEW ECCC-6 NEW	Freshwater Environment	3 - September 2020 - Technical Meetings	Baffinland will address ECCC's outstanding concerns, as identified in their letter to the NIRB on September 4, 2020, through the Nunavut Water Board Water License amendment process for Phase 2	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license
GN DFO	Corporate Environment	3 - September 2020 - Technical Meetings	Baffinland will provide a technical memo providing additional details on Operational Flexibility.	On or before October 16, 2020	
PCA-04b	Marine Environment	3 - September 2020 - Technical Meetings	Baffinland will update the definition of sea ice concentration at which regular shipping activities can proceed as 3/10 ice cover.	NA	Resolution is pending resolution of outstanding DFO issues.
QIA-01 DFO-3.4 NEW PCA-02 WWF-FWS-03	Terrestrial Environment Marine Environment	3 - September 2020 - Technical Meetings	Baffinland will provide an updated draft revised terms of references for the marine and terrestrial working groups, including notes provided by other parties, by October 16.	On or before October 16, 2020	Initiative under existing Project
DFO 3.1.2 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland can confirm that it will not surpass the number of vessels described and assessed in the Phase 2 FEIS Addendum to ship an additional 20% of ore over 12 Mtpa in the maximum operational flexibility scenario. For clarity, this is a limit of 176 ore carriers, 12 freight vessels and 12 fuel vessels.	NA	This commitment will be implemented post PC approval
DFO 3.10.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will provide a detailed water withdrawal plan that includes an in-depth risk analysis informed by site specific fish and fish habitat features for the waterbodies chosen for water withdrawal as supplemental information to water licensing and any DFO Request for Review submission.	NA	This commitment will be implemented post PC approval

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DFO 3.10.2 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will conduct a thorough localized assessment on the waterbodies selected for water withdrawal in order to adequately assess the potential impacts on the fish habitat resulting from 20% of the 10-year dry unit runoff water withdrawal on fish-bearing watercourses and connecting waterbodies. This assessment will include an assessment of the effects to littoral/shore/riparian areas from the proposed water withdrawal, the specific withdrawal locations proposed for each waterbody including fish habitat in the area and updated rationale on how this level of withdrawal will be an environmentally protective threshold. This content will be included as supplemental information to water licensing and regulatory permit applications made to DFO.	NA	This commitment will be implemented post PC approval
DFO 3.10.3 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will provide additional rationale/ assessment to support the assertion that 40% of the 10-year dry unit runoff water withdrawal from non-fish-bearing streams will not negatively affect downstream fish-bearing waterbodies. This content will be included as supplemental information to water licensing and regulatory permit applications made to DFO.	NA	This commitment will be implemented post PC approval
DFO 3.2.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland commits to provide a summary of the following information as part of its annual reporting requirements, and in preliminary field reports within 35 days of Spring shoulder season shipping activities commencing and 15 days of Fall shoulder season activities ending: <ul style="list-style-type: none"> <li>i. marine monitoring programs,</li> <li>ii. determinants for opening and closing the shipping season,</li> <li>iii. ecological and cultural (or "Inuit use") factors that influence shipping activities</li> <li>iiii. other information, as requested by DFO and other regulators and key stakeholders, relevant to the marine environment</li> </ul> The requirement for, and format of, these reports will be included in the final Marine Monitoring Plan, should Phase 2 be approved. Additional information requested after submission of the preliminary field report is to be provided by Baffinland as a memo within 35 days and will be included in Annual Reporting.	NA	This commitment will be implemented post PC approval
DFO 3.2.2 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland commits to updating the Draft Early Shipping Season-Operational Guide, to better characterize considerations used in determining the nominal shipping season. See response to DFO 3.2.2 for the commitment to report on determinants of opening and closing the shipping season.	NA	This commitment will be implemented post PC approval

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DFO 3.3.3 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland commits to collecting acoustic data in the RSA using AMARs to characterize the degree of conservatism in the sound propagation modelling, at an appropriate frequency for the duration of the Phase 2 construction and operation periods. Baffinland will collaborate with Inuit and DFO on the development of the draft program prior to submission to the MEWG for additional advice and recommendations. Recommendations from MEWG members will be treated consistent with the consensus-based decision requirements of the final updated MEWG Terms of Reference. Baffinland commits to updating the marine monitoring plan (MMP) with this long-term monitoring plan, should Phase 2 be approved.	NA	This commitment will be implemented post PC approval
DFO 3.4.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<i>DFO and BIM are still working to update commitment wording from 3.4.1. DFO does not currently agree with the wording provided for 3.4.1. DFO continues to request that a specific monitoring plan for icebreaking/shoulder season be developed and will continue to work with BIM to find agreed upon wording for DFO 3.4.1 NEW.</i>  <del>Baffinland has provided a draft Marine Monitoring Plan (MMP) as part of the Phase 2 review process. Should Phase 2 be approved, Baffinland will update this Plan to reflect all relevant commitments and terms and conditions.</del>	NA	<i>DFO to provide BIM with updated wording for their review, prior to the Public Hearing.</i>
DFO 3.4.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<del>Rather than develop a separate, stand alone monitoring plan specific to icebreaking as suggested by DFO, Baffinland will include a specific section relevant to icebreaking and shoulder season shipping activities in the MMP. Survey methodology and indicators (including rationale) will be determined in consultation with the MEWG, of which DFO is a member. Recommendations from MEWG members will be treated consistent with the consensus based decision requirements of the final updated MEWG Terms of Reference.</del>	NA	This commitment will be implemented post PC approval
DFO 3.4.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<del>An updated draft MMP will be provided to the MEWG for comment and the NIRB within 180 days of issuance of an amended Project Certificate, should Phase 2 be approved. Baffinland commits to continue working with DFO and the MEWG to finalize the Plan.</del>	NA	This commitment will be implemented post PC approval
DFO 3.4.2 NEW	Marine Environment	3 - September 2020 - Technical Meetings	<i>Issue was absent from BIMC's commitment list, but remains an outstanding issue.</i> <i>DFO is working on updated wording for commitments 3.4.2 and 3.4.3 from BIM in order to see these concerns resolved.</i>	NA	<i>DFO to provide updated final wording for the commitment prior to the PHC or shortly thereafter. Commitment to be resolved prior to the Public Hearing.</i>

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DFO 3.4.3 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p><i>DFO is working on updated wording for commitments 3.4.2 and 3.4.3 from BIM in order to see these concerns resolved.</i></p> <p><del>Baffinland commits to produce a response plan for the potential event of an ice entrapment, should this be observed during the annual end of season clearance surveys. This plan will include action level triggers and associated response actions. This plan will be developed in consultation with the MHTO and DFO, understanding that these two groups are ultimately responsible for determining the appropriate course of action should an entrapment event occur.</del></p>	NA	DFO to provide updated final wording for the commitment prior to the PHC or shortly thereafter. Commitment to be resolved prior to the Public Hearing
DFO 3.4.4 NEW	Marine Environment	3 - September 2020 - Technical Meetings	<p><i>This commitment was not present in BIM's commitment list. DFO is continuing to work on the development of mitigation measures and adaptive management strategies to prevent and manage potential impacts from icebreaking and shipping through the shoulder season for a final commitment by BIM. Once there is sufficient scientific evidence to support the proposed measures, or other measures are developed, DFO will share with relevant agencies and BIM for further discussion prior to a Public hearing</i></p>	NA	DFO to share measures and proposed commitment wording prior to the Public hearing.
DFO 3.5 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p><i>DFO does not agree with the proposed wording for this commitment. DFO and other interveners had recommended that Ship-Based Observers (SBOs) should be present on all ships throughout the shipping season. BIM indicated that this was not logistically possible. DFO had discussions with BIM in August 2020 about the possibility of running a pilot program with remote technology to see if it could help with the detection of ship strikes. BIM is currently waiting on some additional guidance from DFO to start developing the pilot project</i></p> <p><del>Baffinland will prepare and submit to DFO a literature review of ship-based marine mammal remote monitoring systems. This literature review will include a summary of commercially available remote wildlife monitoring systems that could be installed on vessels to supplement existing marine mammal monitoring programs and enhance detection of ship strikes on marine mammals. The remote monitoring systems identified in this literature review will inform adaptive management, should the need be triggered. For clarity, in the event of a ship strike on a marine mammal, a single event, although unlikely based on present mitigations (i.e. speed restrictions), would trigger an adaptive management response.</del></p>	Complete	DFO will provide modified wording to BIM's commitment that include details for the pilot project and request that SBO's be present on project vessels throughout the shipping season, where possible. DFO to share measures and proposed commitment wording prior to the Public hearing.



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DFO 3.5 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will implement an incidental marine mammal monitoring program with vessel operators calling on Milne Port, which will request incidental observations of marine mammals to be recorded and relayed to Baffinland. In support of this program, Baffinland will develop educational materials for vessel crew to assist in marine mammal identification and data recording. Baffinland will provide a draft of the materials and program for review by the MEWG before they are finalized.	NA	This commitment will be implemented post PC approval
DFO 3.6.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Project vessels are limited to releasing ballast water at one of the three anchorage locations at Milne Port, or while berthed at the ore dock. Further, prior to any ballast water discharge D-1 compliance testing must be completed. Instructions to not release ballast water prior to arrival at Milne Port and completion of ballast water testing is provided to all ship operators in Baffinland's Standing Instruction to Masters (SITM). This requirement will remain under Phase 2.	NA	This commitment will be implemented post PC approval
DFO 3.6.10 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland commits to work with the MEWG and DFO to establish species-specific Rapid Response Plans. Rapid Response Plans will be developed for species identified as high risk through ongoing NIS monitoring in the receiving environment, the ROV (or any other future) biofouling monitoring program, results yielded from the 2021 biological ballast water sampling pilot program (and any ongoing ballast monitoring), examination of existing invasive species databases and lists in key ecoregions where vessels calling originate from (as per Goldsmit et al., 2020 Global Change Biology), and based on ranking of potential risk using the Canadian Marine Invasive Screening Tool.	NA	This commitment will be implemented post PC approval
DFO 3.6.2 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland commits to record the Milne Port anchorage and associated coordinates where compliance testing and discharge occurs in the ballast water testing forms, completed by Baffinland's environmental monitors. A dataset with discharge coordinates will be provided to MEWG members as part of annual reporting requirements.	NA	This commitment will be implemented post PC approval
DFO 3.6.3 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will require all vessels calling on Milne Port that treat their ballast under the D2 Standard to also perform a ballast water exchange prior to treatment. For ships unable to conduct exchange as specified in Canadian Ballast Water Regulations (e.g. ships on Canadian domestic trips), exchange is to be conducted as specified in revised ABWEZs for Eastern Arctic as per DFO CSAS advice (see DFO 2015, Stewart et al. 2015 and Goldsmit et al. 2019). This updated commitment will be reflected in the 2020 Standing Instructions to Masters.	NA	This commitment will be implemented post PC approval

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DFO 3.6.4 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will consider discontinuing exchange plus treatment requirements should treatment systems efficacy reach a point that makes the benefits of an exchange plus treatment system negligible. This decision will be made in consultation with TC and DFO, and will be based on a consideration of factors outlined in DFO 2019 (i.e. if ballast water organism concentration or composition, environmental conditions, shipping patterns, proportion of voyages meeting the D-2 standard, or available data describing these conditions change in the future, and updates to global research on ballast systems). In this event Baffinland will update ballast water dispersion modelling to more accurately reflect the spectrum of salinity, temperature, and discharge volumes that can be expected to be discharged at Milne Port under Phase 2 operations if prior exchange were to be discontinued.	NA	DFO and BIM met following the Technical Meetings on September 24th. DFO and BIM have agreed that the current wording is sufficient to cover DFO concerns, and BIM agreed to continue to engage with DFO on instrumentation and the data required for if/when the ballast water dispersion model is updated.

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DFO 3.6.5 NEWTC- 02 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p>Transport Canada appreciates the efforts by BIM to ensure current regulations are followed with respect to their plans for ballast water management. Given the learning curve associated with use of ballast water treatment systems, for Phase 2, Transport Canada (TC) in consultation with Fisheries and Oceans Canada (DFO), recommends, in conjunction with present sampling and testing protocols being proposed/adopted [NTD - will be summarized in complete package] by BIM, that BIM implement a ballast water compliance sampling plan based on a risk-based targeting methodology to be developed in consultation with DFO and TC. Such a risk-based methodology should be applied to evaluate the risk of all vessel ballast water management (D1, D2) with subsequent salinity and D-2 biological compliance sampling conducted on vessels identified as high or very high risk. The respective risk-based methodology and associated ballast water compliance sampling plan will be developed in consultation with DFO and TC following completion of DFO's Project-specific sampling conducted on a subset of vessels calling to Milne Port. The risk-based methodology and associated ballast water compliance sampling plan should include a consideration of other compliance initiatives or research being undertaken elsewhere by TC relative to implementation of the D-2 standard. Sampling conducted that supports building a body of knowledge for D-2 treatment systems, beyond biological compliance sampling conducted on high risk and very high risk tanks, should not compromise Baffinland's ability to transport annual ore quantities as approved under a modified Project Certificate No 005. Understanding that the rationale for this program is tied to a learning curve associated with the use of ballast water treatment systems, the compliance sampling program and risk based methodology will be adapted as deemed necessary based on the results of the program.</p>	NA	This commitment will be implemented post PC approval

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DFO 3.6.6 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p><i>DFO and BIM met following the Technical Meetings on September 24th. DFO and BIM have agreed to review wording and should be able to finalize wording prior to the Pre-Hearing Conference, or shortly thereafter</i></p> <p><del>Baffinland remains committed to conducting ship hull biofouling monitoring surveys using an ROV on ore carriers, with focused efforts on areas of the hull and niche areas where biofouling has the greatest potential to occur (e.g. chain lockers, stern tube, rope guard, bottom, rubber side, etc.). The projected number of ore carriers that will be sampled annually will be determined in consultation with the MEWG, of which DFO is a member. Recommendations from MEWG members will be treated consistent with the consensus-based decision requirements of the final updated MEWG Terms of Reference.</del></p>	NA	Updated final wording for the commitment to be provided before the PHC or shortly thereafter. Commitment should be resolved prior to the Public Hearing
DFO 3.6.7 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p>Baffinland commits to updating the marine monitoring plan (MMP) in consultation with MEWG members and this will be completed prior to the start of the Phase 2 increased shipping season. The updated MMP will detail the revised MEEMP sampling design which includes greater seasonal and spatial coverage and increased sampling effort and sample sizes to address DFO concerns related to achieving sufficient statistical power for detection of project effects (<math>\geq 0.8</math>) (as per recommendations in DFO 2020, pages 4-7).</p> <p><u>Background</u></p> <p>The Aquatic Invasive Species (AIS) Monitoring Program is a biological screening program (species ID, presence/absence data); as such, it does not involve any statistical analysis. The updated MMP will include clear protocols for determining identity and status of species collected as part of this program (as per recommendations in DFO 2019 and DFO 2020 and comments on disposition table provided in June (DFO 3.8.1) and November (DFO 3.10.4). The sampling effort for the AIS Monitoring Program is currently very rigorous.</p>	NA	This commitment will be implemented post PC approval
DFO 3.6.8 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland continues to maintain that the identification of high-risk biological species or groupings of species of concern is the primary responsibility of DFO. Despite this, Baffinland is committed to supporting the development of a trigger list of species and associated response plans through the process outlined in response to DFO 3.6.9 and 3.6.10, and to refining that list with DFO following Phase 2 approval.	NA	This commitment will be implemented post PC approval

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DFO 3.6.9 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland commits to follow the most updated version of DFO's AIS Rapid Response Framework in the event that a nonindigenous species is introduced and/or becomes established.	NA	This commitment will be implemented post PC approval
DFO 3.7 NEW	Marine Environment	3 - September 2020 - Technical Meetings	<i>This commitment was not present in BIM's commitment list. There is currently no proposed commitment wording in order to resolve DFO 3.7 NEW. DFO and BIM will continue to work on finding resolution on 3.7</i>	N/A	DFO will provide an update regarding DFO 3.7 NEW prior to the Public hearing.
DFO 3.8 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will provide decision criteria and decision matrix for the selection of water crossing methods for fish bearing watercourses in support of any regulatory permit applications made to DFO.	NA	This commitment will be implemented post PC approval
DFO 3.9.1 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will analyze monitoring reports related to the Tote Road existing watercourses crossings and provide comprehensive lessons learned report (for the Tote Road crossings) that would include strategic analysis of what will be done differently to ensure the fish-passage issue will be mitigated, avoided and addressed. This report will be included as part of any regulatory applications made to DFO.	NA	This commitment will be implemented post PC approval
DFO 3.9.2 NEW	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	Baffinland will provide an updated hydrological assessment of proposed watercourses crossings that includes, but is not limited to, crossing selection and design criteria, flow rates, velocities and discharge, and fish passage. This content will be included as part of any regulatory permit applications made to DFO.	NA	This commitment will be implemented post PC approval
ECCC-1 NEW ECCC-FC4	Atmospheric Environment	02 - February 2020 - Response to Updated Technical Comments	<b>Baffinland commits to investigate and implement black carbon reduction measures, where feasible, and provide a preliminary mitigation measure feasibility assessment 30 days prior to a Public Hearing, and a follow up report in the 2020 Annual Report (which wouldn't be until 2021). The feasibility assessment will consider the use of distillate fuels as a reduction measure for local black carbon emissions.</b>  <del>Baffinland to provide the preliminary feasibility assessment 30 days prior to a Public Hearing, and a follow up report in the 2020 Annual Report (which wouldn't be until 2021)</del>	On or before October 16, 2020	

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CIRNAC-05	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland shall complete thermal modeling of the Waste Rock Facility and include the results in the Waste Rock Management Plan prior to the conclusion of Water Licence Amendment process, subject to NWB requirements.	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license
CIRNAC-07	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland shall confirm the origin of elevated concentrations of aluminum, mercury and copper in Shake Flask Extraction test results for rock materials sourced from quarry and borrow pits for road / railway construction, and develop and implement an appropriate water quality monitoring and management strategy for railway corridor rock quarries as part of water licensing. The monitoring results shall be compared with the FEIS Addendum predictions and appropriate mitigation measures shall be identified and implemented.	NA	This commitment will be implemented post PC approval; CIRNAC 2 NEW aligns with response to CIRNAC-07.
<del>DFO 3.10.2 TC-02</del>	<del>Marine Environment</del>	<del>01 - November 2019 - Public Hearing</del>	<del>Baffinland will revise the Ballast Water Management Plan to include a requirement for all vessels to conduct ballast water exchanges (with or without D2 treatment systems) prior to calling on Milne Port, until such a time that ballast water treatment systems are compliant with the D2 standards set by the IMO. Should Baffinland wish to discontinue the practice of exchange plus treatment, Baffinland will provide updated ballast water modelling that reflects the range of salinity that may be present in the ballast water tanks where no exchange occurs.</del>	<del>NA</del>	<del>Replaced by DFO 3.6 NEW Commitments</del>
<del>DFO 3.10.5</del>	<del>Marine Environment</del>	<del>01 - November 2019 - Public Hearing</del>	<del>Baffinland will update the AIS monitoring program to describe the process it follows for identifying high-risk biological species discovered through its sampling programs.</del>	<del>NA</del>	<del>Replaced by DFO 3.6 NEW Commitments</del>
<del>DFO 3.10.6</del>	<del>Marine Environment</del>	<del>01 - November 2019 - Public Hearing</del>	<del>Baffinland will work with DFO to develop a management and response approach in the event a non-indigenous species is identified during monitoring. This response approach will be added as an attachment to the AIS monitoring program.</del>	<del>NA</del>	<del>Replaced by DFO 3.6 NEW Commitments</del>

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DFO 3.3	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will implement the following requirement for vessels serving the Mary River Project: Once advised of the presence and location of bowhead whales, Masters of project ships operating within the RSA will be instructed to exercise due caution in order to minimize the likelihood of interaction with the mammals. In such events, Masters will be authorized to adjust speed or alter course within safe and prudent navigational constraints to avoid to the extent possible interaction with bowhead whales.	NA	Baffinland notes that the surveillance measures implemented in the Gulf of St Lawrence, as referenced by DFO, are to spot right whales and implement the 10 knot speed restriction. This additional mitigation measure is not required in the RSA as a blanket 9 knot speed limit is in place for the entire season. The only mitigation measure more restrictive than the speed limit is a 15 day shut down for non-tended fixed gear fisheries. Again, this is not applicable to Mary River operations. Baffinland strongly urges DFO to consider the commitment provided above and work with Baffinland to implement it.

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DFO 3.4	Marine Environment	01 - November 2019 - Public Hearing	Environmental and ecological criteria for the opening of the shipping season is described in the Shoulder Season Shipping Operational Guide. The following clarifications will be added to the Shoulder Season Shipping Operational Guide to reflect the environmental and ecological conditions for closing the shipping season.· Environmental - The formation of fastice along the shipping route will trigger the end of the shipping season.· Ecological - There are no ecological triggers to close the shipping season, however, monitoring and adaptive management will be applied to ensure no significant impacts occur.	NA	Seals - During the Fall Season Seals are just beginning to establish breathing holes in the ice as part of their development of an overwinter territory, but this is not considered a critical life cycle period. Seals may avoid establishing breathing holes along the shipping route during this period, but this would be limited to general area of the ship path, which is minimal in extent. Seals do not start denning until January when enough snow is available on the ice for them to build a den. Shipping would not overlap with the denning period.Narwhal- The fall shoulder season will overlap with the outmigration of narwhal throughout October and November. Aerial surveys are planned each year to confirm no entrapment events have occurred, and to inform adaptive management, should it be required.
DFO 3.5.1.	Marine Environment	01 - November 2019 - Public Hearing	During Phase 2 Operations, Baffinland commits to using the walrus haul out buffer zone guidelines set by the US Fish and Wildlife Service (USFWS) and the US Federal Aviation Administration (FAA).	NA	This commitment will be implemented post PC approval



FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
DFO 3.5.2	Marine Environment	01 - November 2019 - Public Hearing	<p>Baffinland will not break ice in closed embayment's and inlets where landfast ice exists. Should other areas of high seal density be encountered along the shipping route during the shoulder season, the Ship Board Observer Program will record and report this for potential adaptive management actions. This may include notices to Masters of project ships operating within the RSA to exercise due caution in order to minimize the likelihood of interaction with the mammals. In such events, Masters will be authorized to adjust speed or alter course within safe and prudent navigational constraints to avoid to the extent possible interactions with high density seal areas.</p> <p>See other commitments related to the SBO Program in response to DFO 3.5.3 and 3.5.6.</p>	NA	This commitment will be implemented post PC approval
DFO 3.5.3	Marine Environment	01 - November 2019 - Public Hearing	Baffinlands Ship Board Observer Program will confirm the current predictions that no seal strikes will occur as a result of project shipping. Should monitoring demonstrate that the predictions are incorrect, Baffinland will implement adaptive management measures in consultation with the MHTO and MEWG.	NA	Baffinland will not provide an updated estimate of ship strikes on seals based on a study that covers a period in time and location that are fundamentally different from what is proposed under Phase 2.
DFO 3.5.4	Marine Environment	01 - November 2019 - Public Hearing	Baffinland is not proposing to ship during sensitive lifecycle periods for seal, which typically occur in the months between March and May. No additional mitigation measure is necessary for the current Shoulder Season Shipping Guide.	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
DFO 3.5.5	Marine Environment	01 - November 2019 - Public Hearing	<ul style="list-style-type: none"> <li>Before commencing shipping, Baffinland must receive written confirmation from the MHTO that the floe edge is no longer being used by community members. No transits to Milne Port will be permitted until confirmation is received.</li> <li>Baffinland will not break ice during ringed seal denning, pupping, nursing or mating periods and will manage its vessel traffic during the Eclipse Sound narwhal summer stock spring migratory period.</li> <li>Furthermore, Baffinland has established several precedent-setting mitigations to minimize potential effects on ringed seal as a result of ice breaking activities, including: <ul style="list-style-type: none"> <li>Restricting the number of transits during the early shoulder season where ice concentrations above 3/10 cannot be avoided.</li> <li>Implementation of speed restrictions (9 knots) that are more conservative than Government of Canada guidelines for speed reduction to 10 knots.</li> <li>Local Inuit Marine Wildlife Observers (MWOs) will be stationed on all icebreaker transits in the RSA and are responsible for alerting vessel Master and crew to observed potential risk of ship strikes on pinnipeds and other marine mammals, or record other signs of disturbance to marine wildlife.</li> </ul> </li> <li>Implementation of a 40-km buffer zone around the floe edge at the entrance of the RSA to reduce interactions between Project vessels and marine mammals (vessels entering the RSA during the spring shoulder season must wait 40 km to the east of the RSA until clearance from the Port Captain is obtained to enter the RSA).</li> </ul>	NA	This commitment will be implemented post PC approval
DFO 3.5.6	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will updated the Marine Monitoring Program to make it clear what behavioral indicators are recorded during the Ship Board Observer Program. These indicators include breaching, flipper slapping, lob tailing, diving, fluking, blowing, resting, looking, feeding, hauled-out, milling, swimming, surfacing. Other recorded information includes initial distance from vessel, minimum distance from vessel (i.e. closest point of approach), and bearing from vessel and movement direction. These methods and indicators are currently described in annual Ship Board Observer Reports.	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
DFO 3.6.2DFO 3.6.6	Marine Environment	01 - November 2019 - Public Hearing	Baffinland is committed to undertaking an end-of-season aerial survey of the LSA for each year shoulder season shipping occurs, to confirm no narwhal entrapment events have occurred. Baffinland will work directly with the Mittimatilik HTO in implementation of this survey. <u>Background</u> Mitigation measures are limited, Baffinland has proposed having an icebreaker re-enter the RSA to create an exit pathway, assuming it is safe to do so. it is uncertain if this is a desirable action from the communities perspective. There is also an issue of identifying a natural event from a project affected one. Baffinland suggests the MEWG is an appropriate forum to investigate such an event occurs in the future, and development adaptive mitigation measures, should they be necessary. Baffinland's commitment to annual aerial surveys is for the life of the project.	NA	This commitment will be implemented post PC approval
DFO 3.7.2	Marine Environment	01 - November 2019 - Public Hearing	Empirical data on ship noise levels have now been collected as part of JASCO's passive acoustic monitoring program for the Project. These data have been analyzed to calculate LRR for these additional areas in the RSA (Eclipse Sound, North Milne Inlet, Koluktoo Bay). Calculations of LRR associated with ship transits at these representative locations will be presented in a 'technical memorandum' or 'technical response', scheduled for delivery to DFO on February 17, 2020. The technical memorandum will include an analysis to estimate the LRR estimations for Phase 2 shipping operations based on the empirical results calculated for 2018 and 2019 shipping operations.	NA	This commitment will be implemented post PC approval
DFO 3.7.4	Marine Environment	01 - November 2019 - Public Hearing	An analyses will be conducted using data collected during the 2019 shipping season to characterize the degree of conservatism in the sound propagation modelling that has been conducted. Additional AMARs have been deployed and will collect data during the Fall 2019 and Spring 2020 seasons to further this analysis. See response to DFO 3.8.4 for commitment to long term acoustic monitoring.	NA	This commitment will be implemented post PC approval; See commitment to DFO 3.8.4 for long term acoustic monitoring.
DFO 3.8.4	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will continue to undertake acoustic monitoring supportive of its operations in accordance with terms and conditions of the existing Project Certificate No. 005.	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
DFO 3.9.1	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will implement an incidental marine mammal monitoring program with vessel operators calling on Milne Port, which will request incidental observations of marine mammals to be recorded and relayed to Baffinland. In support of this program, Baffinland will develop educational materials for vessel crew to assist in marine mammal identification and data recording. Baffinland will provide a draft of the materials and program for review by the MEWG before they are finalized.	NA	This commitment will be implemented post PC approval
<del>DFO-3.10.3,</del> <del>DFO-3.10.4,</del> <del>TC-02,</del> <del>QIA-45,</del> <del>DFO-3.10.4,</del> <del>QIA-44</del>	<del>Marine Environment</del>	01 - November 2019 - Public Hearing	<del>Baffinland will implement a pilot ballast water biological monitoring program for ships calling on Milne Port. This program will be designed to reflect a more appropriately scoped form of a ballast water sampling protocol provided by DFO to Baffinland in 2017. This program will include sampling from one ballast tank on a total of five vessels per shipping season.</del> Baffinland remains committed to continue conducting temperature and salinity test sampling of one randomly selected ballast water tank for all vessels calling to Milne Port, and biological sampling in the marine receiving environment to monitor for non-native species in Milne Port and at Ragged Island.	NA	Replaced by DFO 3.6 NEW Commitments
DFO-3.12	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland will include the requested information in the application for the Fisheries Act Authorization.	NA	This commitment will be implemented post PC approval
DFO-3.13.1	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland will include the requested information in the application for the Fisheries Act Authorization.	NA	This commitment will be implemented post PC approval
DFO-3.13.2	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland will include the requested information in the application for the Fisheries Act Authorization.	NA	This commitment will be implemented post PC approval
DFO-3.14.1	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland will include the requested information in the application for the Fisheries Act Authorization.	NA	This commitment will be implemented post PC approval
DFO-3.14.2	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland will include the requested information in the application for the Fisheries Act Authorization.	NA	This commitment will be implemented post PC approval
DFO-3.14.3	Freshwater Environment	01 - November 2019 - Public Hearing	Baffinland will include the requested information in the application for the Fisheries Act Authorization.	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
ECCC-FC1 HC-FC-02	Atmospheric Environment	01 - November 2019 - Public Hearing	<i>Final language to be developed with BIMC.</i> <del>Baffinland will reflect the commitments provided in its response in the Air Quality and Noise Abatement Management Plan following the issuance of an amended Project Certificate. In the interim these commitments will be captured in a commitment register, to be provided to the Board during the Public Hearings. Baffinland does not object to having relevant terms and conditions modified to reflect this commitment.</del>	NA	This commitment will be implemented post PC approval
ECCC-FC2	Atmospheric Environment	01 - November 2019 - Public Hearing	Baffinland commits to investigate and implement NOX reductions measures, where feasible, and report on this in the 2020 annual air quality report (to be submitted by March 31, 2021).	NA	This commitment will be implemented post PC approval
ECCC-FC3 HC-FC-02	Atmospheric Environment	01 - November 2019 - Public Hearing	<i>Final language to be developed with BIMC.</i> <del>Baffinland will reflect the commitments provided in its response in the Air Quality and Noise Abatement Management Plan following the issuance of an amended Project Certificate. In the interim these commitments will be captured in a commitment register, to be provided to the Board during the Public Hearings. Baffinland does not object to having relevant terms and conditions modified to reflect this commitment.</del>	NA	This commitment will be implemented post PC approval
ECCC-FC4	Marine Environment	01 - November 2019 - Public Hearing	<del>Baffinland commits to investigate and implement black carbon reduction measures, where feasible, and report on this in the 2020 annual air quality report (to be submitted by March 31, 2021). The investigation will consider the use of distillate fuels as a reduction measure for local black carbon emissions.</del>	NA	Replaced by ECCC-01 NEW Commitment
ECCC-FC-5	Marine Environment	01 - November 2019 - Public Hearing	Baffinland remains committed to updating the Phase 1 Waste Rock Management Plan and evaluating the appropriateness of the 0.2% cutoff for PAG classification, irrespective of the Phase 2 approvals process.	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license
ECCC-FC6 WWF-FWS 06	Marine Environment	01 - November 2019 - Public Hearing	Baffinland commits to conduct additional Arctic diesel fuel spill modelling to account for shoulder season shipping and update the SSRP as necessary (Appendix G). This will occur prior to the 2021 shipping season.	NA	This commitment will be implemented post PC approval
HC-FC-01	Socio-economic Environment	01 - November 2019 - Public Hearing	<i>Baffinland commits to investigate and implement NOX reductions measures, where feasible, and report on this in the 2020 annual air quality report (to be submitted by March 31, 2021).</i>  <i>See commitment to ECCC-FC2.</i>	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
HC-FC-02	Socio-economic Environment	01 - November 2019 - Public Hearing	<p>Baffinland will reflect the commitments provided in its response in the Air Quality and Noise Abatement Management Plan following the issuance of an amended Project Certificate. In the interim these commitments will be captured in a commitment register, to be provided to the Board during the Public Hearings. Baffinland does not object to having relevant terms and conditions modified to reflect this commitment.</p> <p>Baffinland commits to:</p> <p>Submit all air quality and meteorological monitoring data as part of the annual reports and compare the monitoring data to the Canadian Ambient Air Quality Standards, where applicable.</p> <ul style="list-style-type: none"> <li>• Include any photos taken of dust on snow in the annual reports</li> <li>• Present the predicted concentrations in the annual reports as a range of absolute concentrations</li> </ul> <p>Baffinland will:</p> <ul style="list-style-type: none"> <li>• Complete the Air Quality and Noise Abatement Management Plan in consultation with HC and other interested interveners.</li> <li>• Monitor PM2.5 and Total Suspended Particulates using continuous monitors at both Milne Port and the Mine site where monitoring already :</li> <li>• The sites that already monitor NO2 and SO2 at both Milne Port and the Mine Site.</li> <li>• New locations on or close to the Project Boundary at both the Milne Port and Mine Site.</li> <li>• Update Air Quality and Noise Abatement Management Plan with the proposed changes.</li> </ul> <p>Baffinland will update the Air Quality and Noise Abatement Management Plan with the following text: "Use the existing continuous air quality monitors on site to validate the predictions of NO2 and other air quality contaminants in the EIS moving forward. Share results through reporting mechanisms, such as the annual report. Should exceedances occur beyond the EIS predictions, include an updated human health risk assessment in the annual report."</p>	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
HC-FC-03	Socio-economic Environment	01 - November 2019 - Public Hearing	<p>Baffinland will continue with monitoring of COPCs reported in the country foods risk assessment during all phases (including closure). If increases in a specific COPC are confirmed to be occurring outside or inside (in the closure phase) of the Potential Development Area (PDA) and if country foods could be influenced by those changes, Baffinland will update the human health risk assessment model with the new data. Decisions related to extending the monitoring program to any relevant country foods would be made based on consideration of risk assessment outcomes.</p> <p>Updated modelling would be triggered by changes from any of the monitoring stations where harvesting could occur. Any remodeling effort should also consider changes (or lack thereof) using a distance gradient approach from the edge of PDA: Near (0–100 m); Far (101 –1,000 m); and Control (&gt;1,000 m) and more ecologically relevant distant stations (i.e., those stations located between 100 m and 1,000 m from the PDA boundary). Consideration of change at PDA (closure phase), near sites (0 – 100m) and far sites (100 – 1,000 m), relative to baseline data, and environmental quality guidelines, in conjunction with statistical analyses, would be used to identify the need for supplementary risk assessment modelling.</p>	NA	This commitment will be implemented post PC approval
NRCan-01	Terrestrial Environment	01 - November 2019 - Public Hearing	<p>Baffinland commits to:</p> <ul style="list-style-type: none"> <li>· Conducting the summer 2019 mapping program in areas where the railway corridor deviates from the Tote Road, including along the Route 1 deviation alignment. This summer mapping program was completed in summer 2019.</li> <li>· Conducting the winter 2019/2020 drilling program along the deviation route, following the proposed Route 3 deviation alignment, and near the port terminus to obtain additional information on subsurface conditions to inform the final design.</li> <li>· Conducting a pre-drilling program, to be completed by the railway contractor and supervised by BIM's Engineer during the construction period. Boreholes will be advanced into permafrost along the rail alignment prior to the railway earthworks. Boreholes will be used to delineate zones of ice-rich and ice-pore permafrost and to determine the required permafrost treatment prior to making cuts and placing fill for the embankments.</li> <li>· Installing thermistors and other monitoring instruments along the rail alignment including along the Route 3 deviation during the pre-drilling programs to establish baseline conditions prior and during rail construction.</li> </ul>	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
NRCan-02	Terrestrial Environment	01 - November 2019 - Public Hearing	Baffinland commits to: <ul style="list-style-type: none"> <li>· Implementing the recommendations to accommodate the 30-year design life provided in the project memorandum 'Analysis of Proposed Rail Line Cut Sections and Port Area Structures Considering a Mine Life of 30 Years' (Hatch, 2019) including those related to pile length embedment and number of piles required for foundations.</li> <li>· Continue to refine the thermal, stability and creep analysis incorporating new data collected during geotechnical investigations and from instrumentation along the railway corridor, along the Route 3 deviation alignment as well the rail alignments outside the rail deviation, to support final design of embankments and bridges.</li> <li>· Consider local factors (such as snow accumulation and presence of water bodies) in the 2D thermal modelling to support final design of embankments, cuts and bridges.</li> <li>· Establish instrumentation along the rail alignment, including along the Route 3 deviation alignment, prior to and during construction to improve characterization of baseline ground conditions, support final design, evaluate impacts due to construction and railway performance, and to inform the implementation of mitigation /maintenance measures when triggers are reached.</li> </ul>	NA	This commitment will be implemented post PC approval
PCA-02	Marine Environment	01 - November 2019 - Public Hearing	Baffinland commits to amend the Terms of Reference for the MEWG in collaboration with MEWG Members.	NA	Resolution is pending resolution of outstanding DFO issues.
PCA-04c	Marine Environment	01 - November 2019 - Public Hearing	Should Phase 2 be approved, Baffinland will continue to engage DFO and Parks Canada through the MEWG for the purposes of ensuring our proposed mitigation and monitoring programs are robust, effective, and responsive.	NA	Resolution is pending resolution of outstanding DFO issues.
QIA-48, TC-04	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will ensure there is a consistent description of ice conditions amongst its relevant management plans and standards of practice and that these terms are translated to Inuktitut for use more generally. Baffinland commits to providing dates and information on the conditions under which the shipping season was opened and closed each season in its Annual Report to NIRB.	NA	Implementation is ongoing, completion not required for environmental assessment purposes
TC-01	Corporate Environment	01 - November 2019 - Public Hearing	Baffinland will contact Transport Canada's NPP Office prior to the submittal of any information to confirm regulatory requirements under the CNWA, should the project be approved to proceed.	NA	This commitment will be implemented post PC approval



FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
TC-02 DFO 3.6.5	Marine Environment	01 - November 2019 - Public Hearing	<p>Transport Canada appreciates the efforts by BIM to ensure current regulations are followed with respect to their plans for ballast water management. Given the learning curve associated with use of ballast water treatment systems, for Phase 2, Transport Canada (TC) in consultation with Fisheries and Oceans Canada (DFO), recommends, in conjunction with present sampling and testing protocols being proposed/adopted [NTD - will be summarized in complete package] by BIM, that BIM implement a ballast water compliance sampling plan based on a risk-based targeting methodology to be developed in consultation with DFO and TC.</p> <p>Such a risk-based methodology should be applied to evaluate the risk of all vessel ballast water management (D1, D2) with subsequent salinity and D-2 biological compliance sampling conducted on vessels identified as high or very high risk. The respective risk-based methodology and associated ballast water compliance sampling plan will be developed in consultation with DFO and TC following completion of DFO's Project-specific sampling conducted on a subset of vessels calling to Milne Port. The risk-based methodology and associated ballast water compliance sampling plan should include a consideration of other compliance initiatives or research being undertaken elsewhere by TC relative to implementation of the D-2 standard.</p> <p>Sampling conducted that supports building a body of knowledge for D-2 treatment systems, beyond biological compliance sampling conducted on high risk and very high risk tanks, should not compromise Baffinland's ability to transport annual ore quantities as approved under a modified Project Certificate No 005. Understanding that the rationale for this program is tied to a learning curve associated with the use of ballast water treatment systems, the compliance sampling program and risk based methodology will be adapted as deemed necessary based on the results of the program</p>	NA	This commitment will be implemented post PC approval
TC-04	Corporate Environment	01 - November 2019 - Public Hearing	For the purposes of shoulder season vessel traffic management, Baffinland considers uninterrupted transits through ice concentrations of 3/10 or less as the open water shipping season. This will be considered in any relevant management plans or operating procedures.	NA	This commitment will be implemented post PC approval
TC-05	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will make the recommended change from TC-05 to the Spill at Sea Response Plan (SSRP).	NA	This commitment will be implemented post PC approval

FWS ID#	Topic	Review Phase	Commitment	Commitment Due Date	Notes
TC-06	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will update the SSRP to designate additional Tier 2 response equipment at Milne Port to enable a dual response as proposed by Transport Canada.	NA	This commitment will be implemented post PC approval
TC-07	Marine Environment	01 - November 2019 - Public Hearing	Baffinland agrees that the use of lifeboats should be avoided and will be removed as part of the spill response equipment on pages 88 and 103 of the SSRP.	NA	This commitment will be implemented post PC approval
TC-08	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will update the SSRP to make it clear no oil discharge is permitted in Arctic waters per the ASSPPR.	NA	This commitment will be implemented post PC approval