

Summary of Baffinland Commitments for the Phase 2 Expansion Project [current to October 18, 2021; DRAFT]							
ID#	FWS ID#	Intervener	Topic	Review Phase	Commitment	Commitment Due Date	Notes
250	NEW	WWF	Atmospheric Environment	8 - Public Hearing (April 2021)	Baffinland commits to tracking and reporting annual GHG emissions for its operations, and upon evaluation of existing data, subsequently pursue efforts to set multi-year energy use and GHG emissions targets that aim to ensure continual performance improvements over time, and achieve alignment with industry best practice, in the final Climate Change Action Plan.	NA	This commitment will be implemented post PC approval
249	NEW	MHTO	Marine Environment	8 - Public Hearing (April 2021)	Baffinland will include body condition, or an equivalent indicator, in its marine monitoring program. For clarity, this is not a commitment to use body condition as an Early Warning Indicator or other adaptive management threshold.	NA	This commitment will be implemented post PC approval
248	NEW	Hamlet of Clyde River	Marine Environment	8 - Public Hearing (April 2021)	Commit to more regular updates of working groups meeting minutes, presentations, etc.	NA	This commitment will be implemented post PC approval
247	NEW	Hamlet of Pond Inlet	Socio-economic Environment	7 - Community Engagements	Baffinland will start an Arctic Char monitoring program in Navy Board Inlet in 2022.	NA	This commitment will be implemented post PC approval
246	NEW	Hamlet of Pond Inlet	Socio-economic Environment	7 - Community Engagements	Baffinland will provide an additional \$10,000 per ore carrier required to transport up to 4.2 MT to the Tasiuqtiit Working Group annually. This payment per ship will be indexed against the consumer price all items index for Iqaluit (not seasonally adjusted). Under Phase 2, this total could reach as high as \$1,680,000 per year. These funds may be used by the Working Group to harvest and supply country food to residents of the community as agreed by the MHTO and Hamlet.	NA	This commitment will be implemented post PC approval

245	NEW	5 North Baffin Communities	Socio-economic Environment	7 - Community Engagements	Baffinland will commit to the creation of 27 new positions in each impacted community (Arctic Bay, Clyde River, Igloolik, Pond Inlet, and Sanirajak). There will be 20 positions within a community-based training program as well as 7 community-based positions, including a Baffinland Community Liaison Officer (BCLO), Inuit Qaujimagatuqangit Advisor, Community Resource Coordinator, Inuit Success Team Advisor, Community Counselor, Trainer and Office Manager. Pond Inlet will have two additional positions, including a second BCLO and a Community Monitoring Coordinator.	NA	This commitment will be implemented post PC approval
244	NEW	5 North Baffin Communities	Socio-economic Environment	7 - Community Engagements	A community garage pilot project will be established to provide opportunities for apprentice mechanics and high school co-op students to further develop their skills while filling a critical services gap that exist in the community for vehicle maintenance. The pilot project will be constructed in Sanirajak, with garages or equivalent projects constructed in Arctic Bay, Clyde River, Igloolik and Pond Inlet following the completion of the pilot project.	NA	This commitment will be implemented post PC approval
243	NEW	5 North Baffin Communities	Socio-economic Environment	7 - Community Engagements	Baffinland will construct and operate a Baffinland office centre in each community. Each office centre will have Baffinland office space, a training room, engagement walls to share Project updates and information, a medical examination room, country food kitchen and an Elders room. Office centres will be constructed in Arctic Bay, Clyde River, Igloolik, Pond Inlet, and Sanirajak.	NA	This commitment will be implemented post PC approval
242	NEW	5 North Baffin Communities	Marine Environment	7 - Community Engagements	Baffinland will not transition from approximately 84 to 168 vessels in a single season, instead, Baffinland commits to a gradual ramp-up to full shipping capacity, adding 21 ore carriers per year starting in year 1 after Phase 2 Approval; additional ore carrier transits during the construction period will be simulated (i.e. will be loaded with ore, but will not be used to ship more ore than can be hauled via the Tote Road (6Mt))	NA	This commitment will be implemented post PC approval
241	NEW	5 North Baffin Communities	Marine Environment	7 - Community Engagements	Baffinland will reduce the maximum number of ore carriers from 176 to 168 that can come to Milne Port in a single year	NA	This commitment will be implemented post PC approval

240	NEW	5 North Baffin Communities	Marine Environment	7 - Community Engagements	Baffinland will develop of a protocol to be followed when sea-ice is being used in Pond Inlet in the spring even when all of the Baffinland conditions for start of the shipping season have been met	NA	This commitment will be implemented post PC approval
239	NEW	5 North Baffin Communities	Marine Environment	7 - Community Engagements	Baffinland has committed to reduce the proposed shipping season to be more in-line with the current project:1) Baffinland will not start shipping before July 15 2) Baffinland will plan to close the shipping season at October 31 (only limited ice conditions and consultation with MHTO may extend this to November 15)(previously committed under row #214)	NA	This commitment will be implemented post PC approval
238	NEW	5 North Baffin Communities	Terrestrial Environment	7 - Community Engagements	To facilitate caribou monitoring and other Inuit driven research along the North Railway, three observation stations, that will double as emergency shelters, will be constructed at locations to be determined with relevant parties. (24 new positions to be held by Inuit will be created to staff the observation stations)	NA	This commitment will be implemented post PC approval
237	NEW	QIA	Terrestrial Environment	6 - Response to Additional Questions	Baffinland is committed to installing outward facing video cameras mounted on the ore haul trains to record the presence of caribou and to record a caribou mortality incident. Video footage of a caribou mortality and photographs from the incident scene will be assessed as part of Baffinland's incident investigation process. Baffinland will report the incident to the QIA, the Hunters and Trappers Organization, and the Department of Environment for the Government of Nunavut following the currently established steps detailed in Baffinland's Reporting Procedure for Wildlife Incidents.	NA	This commitment will be implemented post PC approval
236	NEW	QIA	Terrestrial Environment	6 - Response to Additional Questions	Baffinland is committed to modifying the railway over time to include greater lengths at 1:3, as necessary. The drivers of these extensions will include the results of regional monitoring programs led by the Government of Nunavut, local programs led by Baffinland and/or QIA (through the CRLU monitoring program), and the lived experience of Inuit that travel the area and observe caribou interacting with the railway. Baffinland, working with Inuit and the TEWG will develop a Caribou Crossing Construction Decision Matrix to define the exact process that will be used to make additional modifications to the railway for the purpose of	NA	This commitment will be implemented post PC approval

					caribou crossings. This would be similar to the Additional Level Crossing Construction Decision Matrix submitted in October 2019, describing the process to add additional land use crossings.		
235	ECCC-1 NEW ECCC-FC4 WWF-FWS-06 WWF-FWS-08	ECCC WWF	Atmospheric Environment	6 - Response to Additional Questions	Should Phase 2 be approved, Baffinland will require all ore carriers, through its contracts, to use lighter distillate fuels (MGO or equivalent) within the Nunavut Settlement Area (NSA) starting in 2022. With this commitment, scrubbers serve no purpose and will also not be used within the Nunavut Settlement Area.	NA	This commitment will be implemented post PC approval
219	DFO 3.4.4 NEW (7)	DFO	Marine Environment	5 - Public Hearing 2021	Baffinland commits to collect acoustic data near the floe edge during the 2021 or 2022 shipping season. Baffinland will collaborate with Inuit and DFO on the development of the draft program following the process as outlined in DFO 3.3.3 (NEW).	NA	This commitment will be implemented post PC approval
218	DFO 3.4.4 NEW (6)	DFO	Marine Environment	5 - Public Hearing 2021	Host dedicated workshops throughout 2021 to identify, develop and review objectives, indicators, thresholds and responses to be applied in Baffinland's adaptive management of project activities in the marine environment, including icebreaking. Baffinland and the MEWG will review these objectives, indicators, thresholds and responses bi-annually to determine if they are still sufficient, or if more suitable measures may exist (as supported by literature, Project monitoring, updated national or international guidelines, and/or measures applied for similar projects, if relevant to Project conditions). This includes working with the MEWG to improve the existing monitoring and reporting for the Early Warning Indicator(s); and working with the MEWG to review and ensure that existing EWIs are effective and select new or additional EWIs, where needed. If and when they are available, DFO will provide the MEWG with indicators and values used by DFO for the purposes of stock assessment and management of narwhal or other marine	NA	This commitment will be implemented post PC approval

**Commented [A1]:** Instead of this commitment, ECCC would like to see the proposed term and condition for the Canadian EEZ, inclusive of the NSA (as per ECCC's Written Closing Statement).

					mammals. Monitoring methodologies for the selected indicators will be informed by DFO and Inuit in advance of submission to the MEWG. These recommendations and the implementation of monitoring will begin no later than the 2022 shipping season.		
217	DFO 3.4.4 NEW (5)	DFO	Marine Environment	5 - Public Hearing 2021	Conduct monitoring using remote technology during ice breaking and shoulder season shipping activities, as a component of DFO 3.5 NEW, to detect and monitor ship strikes and sea ice.	NA	This commitment will be implemented post PC approval
216	DFO 3.4.4 NEW (4)	DFO	Marine Environment	5 - Public Hearing 2021	Provide, in a report: <ul style="list-style-type: none"> <li>• Confirm whether icebreaker vessels were used in spring and fall shoulder season transits;</li> <li>• Baffinland will provide daily ice conditions for days icebreakers were used; and</li> <li>• Updated noise exposure calculations for a half-transit vs full-transit scenario for the shoulder seasons once acoustic monitoring from the 2019 shoulder seasons has been processed. Based on DFO's review of information provided in point 4, if DFO determines that use of half-transit scenario exceeds established thresholds for duration of exposure to noise disturbance for marine mammals, then Baffinland will not operationalize the use of half-transits in either or both seasons.</li> </ul>	NA	This commitment will be implemented post PC approval

215	DFO 3.4.4 NEW (3)	DFO	Marine Environment	5 - Public Hearing 2021	<p>Beginning in 2021, apply the following transit restriction mitigations in the fall:</p> <ul style="list-style-type: none"> <li>• When a continuous sailing route of open water and/or new ice (&lt;10cm) occurs between the entrance of Pond Inlet and Milne Port, then icebreaker transits and other unescorted vessels in the RSA may proceed under open-water operating conditions.</li> <li>• A maximum of two transits or four half transits will occur per day (24-h period) where grey ice (10-15cm) cannot be avoided along the shipping route.</li> <li>• No breaking of landfast ice along the shipping route.</li> </ul> <p>For the purpose of this commitment, the following terms are defined as:</p> <ul style="list-style-type: none"> <li>• Open-water: <ul style="list-style-type: none"> <li>i. for the commencement of annual shipping season: for the purposes of the project, this is uninterrupted transits through ice concentration of 3/10 or less.</li> <li>ii. For the close of the annual shipping season: for the purposes of the project, this is uninterrupted transits through new ice depths of less than 10 cm.</li> </ul> </li> <li>• Half-transit: the equivalent of half or less of the distance between Milne Port to the eastern edge of the RSA (73 W longitude).</li> </ul>	NA	This commitment will be implemented post PC approval
214	DFO 3.4.4 NEW (2)	DFO	Marine Environment	5 - Public Hearing 2021	2. Plan to complete shipping by no later than October 31st of any given year. On an exceptional basis, Baffinland may ship up until November 15th, provided a complete and operational adaptive management plan is in place.	NA	This commitment will be implemented post PC approval
213	DFO 3.4.4 NEW (1)	DFO	Marine Environment	5 - Public Hearing 2021	Apply spring transit restriction mitigations described in the Assessment of Icebreaking Activities as long as ice concentrations, as defined by the Canadian Ice Service, of greater than 3/10 persist along the Northern Shipping Route, or meet the obligations of applicable commitments to others if more conservative, to determine the earliest date for commencing the shipping season. Initiation of this commitment will begin in 2021.	NA	This commitment will be implemented post PC approval

209	DFO 3.6.8 NEW QIA-43 QIA-44 QIA-45	DFO/QIA	Marine Environment	4 - Post September 2020 Technical Meetings	Updated commitment wording in relation to DFO 3.6.8 NEW: 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 high biological risk species or groupings of species of concern and associated response plans through the process outlined in response to DFO 3.6.9 and DFO 3.6.10 and to refining that list with DFO on an ongoing basis starting in 2021.	NA	This commitment will be implemented post PC approval
208	DFO 3.6.7 NEW QIA-43 QIA-44 QIA-45	DFO QIA	Marine Environment	4 - Post September 2020 Technical Meetings	Updated commitment wording in relation to DFO 3.6.7 NEW:  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 2022 shipping season and prior to any Phase 2 shipping. 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 ( $\geq 0.8$ , as per recommendations in DFO 2020, pages 4-7). The updated MMP will include clear protocols for determining identity and status of species collected as part of this program.	NA	This commitment will be implemented post PC approval

206	DFO 3.6.4 NEW QIA-43 QIA-44 QIA-45	DFO QIA	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Updated commitment wording in relation to DFO 3.6.4 NEW:</p> <p>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 changes 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. Baffinland will conduct a risk-based assessment of contaminants that could be released into Milne Inlet in the event project ore vessels switch from exchange plus treatment to just treatment of their ballast water.</p>	NA	This commitment will be implemented post PC approval
205	DFO 3.6.3 NEW QIA-44 QIA-45	DFO QIA	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Updated commitment wording in relation to DFO 3.6.3 NEW:</p> <p>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. By 2024, for ore carriers originating from Canadian waters (i.e., domestic trips) Baffinland will only charter vessels equipped with treatment systems, and will require those vessels to treat their ballast under the D2 Standard and 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 2021 Standing Instructions to Masters.</p>	NA	This commitment will be implemented post PC approval

204	DFO 3.6.2 NEW QIA-43 QIA-44 QIA-45	DFOQIA	Marine Environment	4 - Post September 2020 Technical Meetings	Updated commitment wording in relation to DFO 3.6.2 NEW: 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. Baffinland will also report the duration and volume that occurs at each discharge point concurrent with biological testing that will be conducted to support the risk based methodology under DFO 3.6.5, and for one additional year following commissioning of the second ore dock, if required. A dataset with discharge coordinates and the durations and volumes of discharges at each discharge point will be provided to MEWG members as part of annual reporting.	NA	This commitment will be implemented post PC approval
203	DFO 3.6.1 NEW QIA-43 QIA-44 QIA-45	DFO QIA	Marine Environment	4 - Post September 2020 Technical Meetings	Updated commitment wording in relation to DFO 3.6.1 NEW:  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
199	PCA-03	PCA	Marine Environment	4 - Post September 2020 Technical Meetings	See Commitments to DFO 3.6.6 NEW	NA	This commitment will be implemented post PC approval

**Commented [A2]:** DFO: DFO interpreted this as just clarifying info and not a commitment.

198	DFO 3.7 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Baffinland recognizes that DFO disagrees with the determinations of the Combined Effects Assessment located in Table 22 of Baffinland's Marine Mammal Monitoring Technical Memorandum updated in May 2020 (document # 1663724-186-TM-Rev2-38000). DFO is concerned that the combined effects assessment does not adequately consider uncertainty and potential interactions between combined effects, nor does it consider combined effects outside of the Regional Study Area. To account for residual uncertainty in the effects assessment, Baffinland has made several commitments related to the strengthening of monitoring programs, as well as the implementation of pilot projects to better detect and monitor effects of the project on the marine environment. Implementation of these commitments will be developed in collaboration with DFO, Inuit, and relevant organizations to ensure that all recommendations and concerns are addressed and accounted for. If results of the monitoring programs indicate that there are significant or meaningful impacts to the marine environment, Baffinland commits to undertake investigations to determine the cause of the impact, and will identify any mitigations or other adaptive management strategies to address the impact for review and recommendations by Inuit and the MEWG. Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference.</p>	NA	This commitment will be implemented post PC approval
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197	DFO 3.6.6 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>BIM commits to ensuring that vessels arriving to Milne Port and Steensby Port are following IMO International Guidelines for Biofouling Management (and any associated updates to these Guidelines) by including adherence to these Guidelines as a requirement in vessel procurement contracts.</p> <ul style="list-style-type: none"> <li>• Baffinland will include in its contracts with ship owners a requirement to follow IMO Guidelines for Biofouling Management</li> <li>• Baffinland will require each vessel to maintain a Biofouling Management Plan and Biofouling Record Book consistent with Appendix 1 and 2 of the IMO Guidelines</li> <li>• Baffinland will provide a copy of the management plans and record books for each vessel in its Annual Report to the MEWG.</li> <li>• Initiation of this commitment will begin in 2021.</li> </ul>	NA	This commitment will be implemented post PC approval
196	DFO 3.6.6 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>BIM will develop a robust monitoring program design with input from DFO and other relevant parties that describes its plan for conducting ROV surveys of vessels to evaluate the extent of biofouling on ship hulls arriving in Milne Port prior to the 2022 shipping season.</p> <p>The sampling design will include appropriate sampling effort (with respect to number of vessels and coverage of each vessel) to evaluate differences in extent of biofouling across vessels with different biofouling management measures and histories to provide data for risk assessments to guide future monitoring and management of high risk vessels. Targets for sampling efforts will be established in consultation with DFO and submitted for review and recommendations from Inuit and the MEWG. Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference.</p> <p>This monitoring program will also be applied to vessels calling at Steensby Port as soon as shipping commences for the southern route</p>	NA	This commitment will be implemented post PC approval

195	DFO 3.6.6 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	Based on new information gathered through vessel biofouling monitoring, a review of vessels Biofouling Management Plans and Record Books and, where known, a review of vessels sailing history relative to variables that could influence the extent of hull fouling and have already been well described in the literature (e.g., Coutts 1999; Coutts & Taylor 2004; Ruiz & Smith 2005), BIM will develop a risk assessment and establish a risk-based sampling plan to guide future monitoring and management of high risk vessels. This risk assessment and risk-based sampling plan will be developed in consultation with DFO, and submitted to the MEWG (of which DFO is a member) for review and recommendations. Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference	NA	This commitment will be implemented post PC approval
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194	DFO 3.6.6 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Biological sampling (i.e., collection of genetic material, tissue samples, and/or whole organisms) of vessel biofouling would contribute to the identification and monitoring of aquatic invasive or non-indigenous species that have the potential to propagate in northern waters as a result of the Project's shipping activities. BIM will revisit the state of technology and methods used to assess and conduct biological sampling of vessel biofouling and submit a report, to the MEWG by the end of 2021<sup>122</sup>, on options that exist to conduct this work. It is not expected that this report will consider diving as a means to conduct the biological sampling.</p> <ul style="list-style-type: none"> <li>Once a feasible and safe technology or method has been determined with the MEWG, a pilot program will be run during the next shipping season to determine if it is suitable. If it is not, the report will be revisited and a new technology or method will be selected for another pilot program to be implemented during the next shipping season.</li> <li>Based on the results of the pilot program, it will be confirmed with the MEWG whether a technically and economically feasible technology or methods exist. If the MEWG agrees by consensus that the program stands to provide valuable data, BIM will update its MMP to include a biological sampling component for biofouling in advance of the next shipping season. The updated monitoring plan will be provided to the MEWG for review and comment before it is finalized.</li> <li>BIM will revise and update its risk assessment and risk-based sampling plan (see 3, above) once a robust set of biological data has been collected. This will be reviewed by the MEWG prior to the next shipping season. Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference. Any feasible technology or method for biological sampling applied at Milne Port will also be applied at Steensby Port.</li> </ul>	NA	This commitment will be implemented post PC approval
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**Commented [A3]:** DFO: We acknowledge that the NIRB has requested that this report be completed in advance of the 2022 shipping season, and that a pilot project be implemented during the 2022 shipping season, as per the NIRB's 2020-2021 Annual Monitoring Report Recommendations. DFO expects that an option for biological sampling of vessel biofouling will be selected based on MEWG recommendations.

193	DFO 3.6.6 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	In the event that modifications to biofouling management practices are proposed, Baffinland will consult with DFO and other relevant parties to determine if updates to the risk assessment and risk-based sampling plan are required. Updates to the assessment and the sampling plan will be submitted to the MEWG for review and recommendations prior to implementation. Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference.	NA	This commitment will be implemented post PC approval
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192	DFO 3.5 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Baffinland has indicated that it is only feasible to have Marine Wildlife Observer's present on the MSV Botnica. Noting that having MWO's present on ships may not be feasible at all times due to safety concerns, and that certain environmental conditions may limit visibility, Baffinland commits to develop a pilot project using remote technology to monitor for ship strikes along the shipping route within the Nunavut Settlement Area. The intent of the pilot project is to determine the efficacy of mitigation to prevent ship strikes and of monitoring to detect ship strikes and any near misses. To solicit early feedback from DFO in advance of developing and submitting the methodology and parameters for the monitoring program to the MEWG, DFO will provide reports from all comparable studies conducted by DFO 8 months in advance of the start of the program and will identify what aspects of these programs DFO is recommending Baffinland integrate into the program design. Where relevant, Baffinland will incorporate the guidance provided by DFO into the study design prior to distributing it to the MEWG for review. Methodology and parameters for the monitoring program will be submitted to the MEWG (of which DFO is a member) for review and recommendations. Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference. The monitoring program will run for three years, and will begin one year in advance of Phase 2 shipping operations, with a report submitted to DFO and MEWG members each year the program is implemented. The report will include the following information:</p> <ol style="list-style-type: none"> <li>1. The number of hours and ships on which the program ran</li> <li>2. Types and size of vessels on which the program ran</li> <li>3. Timing during the shipping season when the program was run</li> <li>4. The number of vessels that were called to Milne Port relative to Project certificate limits</li> </ol>	NA	This commitment will be implemented post PC approval
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				<p>5. If distance of animals to the vessels can be calculated, a discussion of relative CPAs.</p> <p>-6. Relevant environmental conditions that may affect detection or increase potential likelihood of an encounter with marine mammals</p> <p>7. If the program is collecting information related to Project effects on the marine environment that is not otherwise being collected through other programs.</p> <p>78. Discussion of cost/value of the Project.</p> <p>After the third year, Baffinland will submit an overview report on the program, to the MEWG for review. This report will document and discuss the benefits of the project and any challenges faced. If the pilot program confirms ship strikes and/or near misses are occurring the project will be extended and included as a component of the MMP, in consultation with the MEWG, of which DFO is a member. Otherwise, the program will be discontinued as a permanent component of the MMP based on the above listed factors, though the program may be implemented again periodically based on advice from the MEWG or Inuit.</p>		
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**Commented [A4]:** DFO: This is a separate consideration, and should be listed as number 7.

**Commented [A5]:** DFO: This is consideration number 8.

191	DFO 3.4.3 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Baffinland commits to run an annual end of season clearance survey. The survey will occur within 7 days following the close of the shipping season. Determination on the need for the end of season surveys will be where ice conditions warrant the survey, and in collaboration with MHTO and DFO. Baffinland commits to provide GIS coordinates and a description of group size(s) of narwhal along the aerial survey tracks. In addition, Baffinland will document ice conditions along the aerial survey tracks in order to inform changes in ice conditions and/or areas of greater risk for entrapment. This data will be provided to DFO as part of the fall shoulder season shipping reports as committed to under DFO 3.2.1 (NEW).</p> <p>A reporting structure will be determined in collaboration with MHTO, DFO, and other relevant boards and organizations in the event an ice entrapment is observed during the annual end of season clearance survey, as will procedures for determining if the event is a natural or project-related event, and associated response actions. This reporting structure is essential to determine the best course of action should an ice entrapment occur. After five years of annual end of season clearance surveys once Phase 2 shipping is operational, Baffinland and DFO will collaborate to analyze the data acquired from these surveys to determine what has been learned about any potential ice entrapments, and if the annual surveys should continue to proceed.</p>	NA	This commitment will be implemented post PC approval
190	DFO 3.4.2 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	<p>Baffinland recognizes that DFO disagrees with the certainty assigned to the potential for ice entrapments of marine mammals in the Phase 2 FEIS Addendum. To address DFO's concerns about uncertainty, Baffinland has committed to run annual end of season clearance surveys (DFO 3.6.2) and develop a response plan for the potential event of an ice entrapment (DFO 3.4.3 NEW).</p>	NA	This commitment will be implemented post PC approval

189	DFO 3.4.1 NEW	DFO	Marine Environment	4 - Post September 2020 Technical Meetings	Baffinland commits to update the Marine Monitoring Plan (MMP) to include a specific section relevant to icebreaking and shoulder season shipping activities in advance of the 2021 shipping season. Through the ICA, Baffinland is also committed to the development initial Indicators for the MMP in collaboration with QIA by December 2020. These initial OITR's will then be subject to review by Inuit (through the Inuit Committee) and regulators (through the MEWG) before finalization (no later than August 30, 2021). In advance of the 2021 shipping season, BIM can also commit to providing an updated draft MMP that will include a placeholder for a dedicated section specific to icebreaking and shoulder season activities. A full update to the MMP will occur following receipt of a positive decision from the Minister. Updates to the MMP will be actively worked on with the MEWG in 2021 (following a decision). A final MMP would then be in place for the 2022 shipping season. Recommendations from MEWG members on survey methodologies and initial indicators will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference.	NA	This commitment will be implemented post PC approval
188	CIRNAC-01 NEW	CIRNAC	Freshwater Environment	3 - September 2020 - Technical Meetings	CIRNAC requests that Baffinland commits to the providing the following information during the Water Licence Amendment process, subject to Nunavut Water Board requirements. 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). 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.	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license

187	CIRNAC-01a NEW	CIRNAC	Terrestrial Environment	3 - September 2020 - Technical Meetings	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.	NA	This commitment will be implemented post PC approval
186	CIRNAC-03 NEW	CIRNAC	Freshwater Environment	3 - September 2020 - Technical Meetings	CIRNAC requests that Baffinland commits to the providing the following information during the Water Licence Amendment process, subject to Nunavut Water Board requirements. 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. 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. 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.	NA	This issue is resolved for environmental assessment purposes and will be further addressed during water license
185	DFO-3.6.4 DFO-3.6.6	DFO	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

**Commented [A6]:** DFO: These items are resolved based on commitments made through DFO 3.6.3 NEW. BIM commitment for DFO 3.6.6 reads: 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 Mittimatalik HTO in implementation of this survey.

184	ECCC-3 NEW ECCC-4 NEW ECCC-6 NEW	ECCC	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
176	IWG NrCan	IWG	Terrestrial Environment	3 - September 2020 - Technical Meetings	Baffinland will share the results of the Route 3 Geotechnical Program, currently planned to begin in October 2020, with the Igloolik Working Group and Natural Resources Canada	NA	Results will be shared as they become available
173	GN DFO	GN	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	
168	PCA-04b	PCA	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	This commitment will be implemented post PC approval  Resolution is pending resolution of outstanding DFO issues
164	QIA-01 DFO-3.4 NEW PCA-02 WWF-FWS-03	QIA	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
137	General	General	Corporate Environment	3 - September 2020 - Technical Meetings	Baffinland commits to including information on activities and modifications made to the Project resulting from input from the Inuit Committee, the Inuit Stewardship Plan, the Inuit Social Oversight Committee, and any Culture Resource and Land Use assessments and monitoring results in their Annual Report to NIRB.	NA	This commitment will be implemented post PC approval

127	DFO 3.1.2 NEW	DFO	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
126	DFO 3.10.1 NEW	DFO	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
125	DFO 3.10.2 NEW	DFO	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
124	DFO 3.10.3 NEW	DFO	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

**Commented [A7]:** DFO: We interpreted this as a clarifying response and not a commitment. But this is consistent with what DFO has.

123	DFO 3.2.1 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p>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 <del>15-30</del> days of Fall shoulder season activities ending:</p> <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> <p>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.</p>	NA	This commitment will be implemented post PC approval
122	DFO 3.2.2 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p>Baffinland commits to updating the Draft Early Shipping Season-Operational Guide, to better characterize considerations used in determining the nominal shipping season.</p> <p>See response to <del>DFO 3.2.2-1</del> NEW for the commitment to report on determinants of opening and closing the shipping season.</p>	NA	This commitment will be implemented post PC approval
121	DFO 3.3.3 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p>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 <del>consensus-based decision-making</del> requirements <del>of the final as outlined in the forthcoming</del> updated MEWG Terms of Reference. Baffinland</p>	NA	This commitment will be implemented post PC approval

**Commented [A8]:** DFO: This should read as 30 days, based on discussions between DFO and BIM.

**Commented [A9]:** DFO: This should say DFO 3.2.1 NEW

**Commented [A10]:** DFO: This should say: Recommendations from MEWG members will be treated consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference.

					commits to updating the marine monitoring plan (MMP) with this long-term monitoring plan, should Phase 2 be approved.		
120	DFO 3.4.1 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<del>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.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	Replaced by new commitment
119	DFO 3.4.1 NEW	DFO	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	Replaced by new commitment

118	DFO 3.4.1 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	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.	NA	Replaced by new commitment
117	DFO 3.4.3 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	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.	NA	Replaced by new commitment
116	DFO 3.5 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	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.	Complete	Replaced by new commitment
115	DFO 3.5 NEW	DFO	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	NA	This commitment will be implemented post PC approval

					a draft of the materials and program for review by the MEWG before they are finalized.		
114	DFO 3.6.1 NEW	DFO	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
113	DFO 3.6.10 NEW	DFO	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
112	DFO 3.6.2 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<del>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.</del>	NA	Replaced by new commitment wording incorporating input from QIA

**Commented [A11]:** DFO: This is an older commitment for DFO 3.5 NEW that DFO does not have in its disposition table. Unclear if BIM intended to cross this out (as they have done with old iterations of commitments) or if they intend to keep this as a commitment. DFO does see value in incidental marine mammal monitoring, but notes that the updated commitment for DFO 3.5 NEW is more specific and discusses a dedicated monitoring program. DFO recommends that this commitment (under 3.5 NEW) be crossed out.

**Commented [A12]:** DFO: DFO interpreted this as a clarifying response, but the wording is consistent. No issues.

111	DFO 3.6.3 NEW	DFO	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	Replaced by new commitment wording incorporating input from QIA
110	DFO 3.6.4 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<del>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.</del>	NA	Replaced by new commitment wording incorporating input from QIA

109	DFO 3.6.5 NEW TC-02 NEW	DFO 3.6.5 NEW TC	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 management measures and sampling and testing protocols being proposed/adopted 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. This approach will be supported by additional commitments provided in response to the DFO 3.6 NEW series of recommendations related to ballast water, hull fouling and aquatic invasive species.</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</p>	NA	This commitment will be implemented post PC approval
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					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.		
108	DFO 3.6.6 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<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.</del>	NA	Replaced by new series of commitments to DFO

					Recommendations from MEWG members will be treated consistent with the consensus based decision requirements of the final updated MEWG Terms of Reference.		
107	DFO 3.6.7 NEW	DFO	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> 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	Replaced by new commitment wording incorporating input from QIA
106	DFO 3.6.8 NEW	DFO	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	Replaced by new commitment wording incorporating input from QIA

105	DFO 3.6.9 NEW	DFO	Marine Environment	02 - February 2020 - Response to Updated Technical Comments	<p><del>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.</del></p> <p><a href="#">Baffinland commits to follow the most recent DFO published Rapid Response Framework in the event that a non-indigenous species is introduced and/or becomes established, and will incorporate updates as recommended by DFO and the MEWG, consistent with the decision-making requirements as outlined in the forthcoming updated MEWG Terms of Reference.</a></p>	NA	This commitment will be implemented post PC approval
104	DFO 3.8 NEW	DFO	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
103	DFO 3.9.1 NEW	DFO	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
102	DFO 3.9.2 NEW	DFO	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

101	ECCC-1 NEW ECCC-FC4	ECCC	Atmospheric Environment	02 - February 2020 - Response to Updated Technical Comments	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 <sup>01</sup> Annual Report (which wouldn't be until 2021 <sup>02</sup> ). The feasibility assessment will consider the use of distillate fuels as a reduction measure for local black carbon emissions. <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	Updated commitment wording included here
100	CIRNAC-05	CIRNAC	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
99	CIRNAC-07	CIRNAC	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.
98	<del>DFO 3.10.2 TC-02</del>	<del>DFO 3.10.2 TC</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>

**Commented [A13]:** ECCC: The feasibility study was completed, however the follow up report was not submitted with the 2020 Annual report.

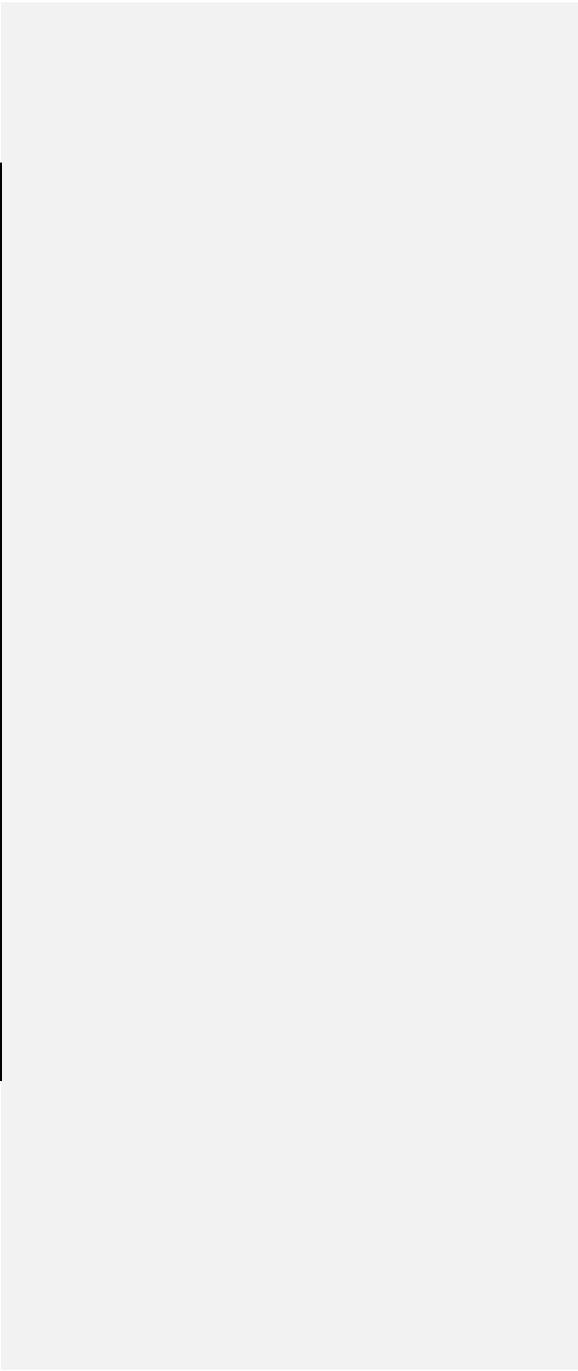
**Commented [A14R13]:** Note: ECCC recommended dates be changed to 2021 for annual report, issued in 2022.

97	DFO 3.10.5	DFO	Marine Environment	01 - November 2019 - Public Hearing	Baffinland will update the AIS monitoring program to describe the process it follows for identifying high risk biological species discovered through its sampling programs.	NA	Replaced by DFO 3.6 NEW Commitments
96	DFO 3.10.6	DFO	Marine Environment	01 - November 2019 - Public Hearing	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.	NA	Replaced by DFO 3.6 NEW Commitments

95	DFO 3.3	DFO	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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94	DFO 3.4	DFO	Marine Environment	01 - November 2019 - Public Hearing	<p>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:</p> <ul style="list-style-type: none"> <li>Environmental - The formation of fastice along the shipping route will trigger the end of the shipping season.</li> <li>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.</li> </ul>	NA	<p>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.</p> <p>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</p>
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								management, should it be required.
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93	DFO 3.5.1.	DFO	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
92	DFO 3.5.2	DFO	Marine Environment	01 - November 2019 - Public Hearing	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.  See other commitments related to the SBO Program in response to DFO 3.5.3 and 3.5.6.	NA	This commitment will be implemented post PC approval
91	DFO 3.5.3	DFO	Marine Environment	01 - November 2019 - Public Hearing	Baffinland's 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.
90	DFO 3.5.4	DFO	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

**Commented [A15]:** DFO: It was DFO's interpretation that this was addressed by DFO 3.4.1 NEW, however do not see any issue with this being kept.

89	DFO 3.5.5	DFO	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> </ul> <p>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).</p>	NA	This commitment will be implemented post PC approval
88	DFO 3.5.6	DFO	Marine Environment	01 - November 2019 - Public Hearing	<p>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</p>	NA	This commitment will be implemented post PC approval

					methods and indicators are currently described in annual Ship Board Observer Reports.		
87	DFO 3.6.2 DFO 3.6.6	DFO	Marine Environment	01 - November 2019 - Public Hearing	<p>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.</p> <p><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.</p>	NA	This commitment will be implemented post PC approval
86	DFO 3.7.2	DFO	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	NA	This commitment will be implemented post PC approval

					operations based on the empirical results calculated for 2018 and 2019 shipping operations.		
85	DFO 3.7.4	DFO	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.
84	DFO 3.8.4	DFO	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
83	DFO 3.9.1	DFO	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

**Commented [A16]:** DFO: This is the same as what DFO has for this commitment ID. However, BIM did retain this for DFO 3.5 NEW, which has been updated. DFO made a comment on that one as well. Suggest removing that from DFO 3.5 NEW (because it is not what we have) and retaining DFO 3.9.1.

82	DFO-3.10.3, DFO-3.10.4, TC-02, QIA-45, DFO- 3.10.4, QIA-44	DFO	Marine Environment	01 - November 2019 - Public Hearing	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. 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
81	DFO-3.12	DFO	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
80	DFO-3.13.1	DFO	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
79	DFO-3.13.2	DFO	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
78	DFO-3.14.1	DFO	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
77	DFO-3.14.2	DFO	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

76	DFO-3.14.3	DFO	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
75	ECCC-FC1 <del>HC-FC-02</del>	ECCC	Atmospheric Environment	01 - November 2019 - Public Hearing	Final language to be developed with BIMC. Proposed by BIM: Baffinland will provide all quality assured measured air quality and meteorological data in an annual report and compare to applicable criteria as outlined in the revised Air Quality and Noise Abatement Plan (AQNAMP) for the project. The annual report will include all raw data, averages in graphical and tabular form as most relevant to the data set, comparison to relevant criteria and visual presentation including wind roses and comparisons to previous year's data. In relation to photography, if major dusting events are observed, they will be photographed and included in the annual report. Also, the available satellite imagery will be reviewed and included if considered relevant. The use of satellite imagery will be evaluated on an ongoing basis to confirm whether it adds value or provides any relevant context to the dust fall evaluations. As the revised AQNAMP will be updated to detail these reporting requirements specifically, additional requirements in the Terms and Conditions of the Project are not deemed necessary. As per recent discussions, the 2020 CAAQS would be used for comparison purposes only with the objective to "keep clean areas clean" with respect to ambient air quality while the Project Standards are based on Nunavut Standards where available, or otherwise the most stringent available from a Provincial or other Territorial Government. Appendix G includes memos describing dustfall management action triggers for the protection of human health and vegetation. Baffinland will reflect the commitment to annual reporting in the final AQNAMP for the Phase 2 Proposal and subsequently does not believe a new Term and Condition is required. <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.</del>	NA	This commitment will be implemented post PC approval

					<del>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>		
74	ECCC-FC2	ECCC	Atmospheric Environment	01 - November 2019 - Public Hearing	Baffinland commits to investigate and implement NOX reductions measures, where feasible, and report on this in the 2021 <sup>9</sup> annual air quality report (to be submitted by March 31, 202 <sup>4</sup> <del>2</del> ).	NA	This commitment will be implemented post PC approval

**Commented [A17]:** ECCC: ECCC has reviewed and is okay with the proposed wording

**Commented [A18]:** ECCC: As per the comment that the commitment will be implemented post-PC approval, the dates need to be updated

73	ECCC-FC3 HC-FC-02	ECCC	Atmospheric Environment	01 - November 2019 - Public Hearing	<p>Final language to be developed with BIMC. Proposed by BIM:Baffinland is committed to updating the AQNAMP in consultation with ECCC and other interested interveners and has undertaken a number of discussions in relation to this commitment. The revised AQNAMP will include the following (which is consistent with ECCC's recommendations):</p> <ul style="list-style-type: none"> <li>• Monitor PM2.5 and TSP using continuous monitors at: <ul style="list-style-type: none"> <li>o The sites that already monitor NO<sup>2</sup> and SO<sup>2</sup> at both Milne Port and the Mine Site.</li> <li>o Seasonally at at least one new location on or close to the Project Boundary at both the Milne Port and Mine Site considering prevailing wind direction during the peak dust season and locations of sensitive receptors (camp locations). These will be seasonal as permanent power is not available near the boundaries thus the systems will run on solar power as feasible during the summer.</li> </ul> </li> </ul> <p>The revised AQNAMP will also include the following recommended items:</p> <ul style="list-style-type: none"> <li>• Presentation of the predicted concentrations in the AQNAMP as a range of absolute concentrations.</li> <li>• Investigation of ways to mitigate the emissions from the stockpiles as warranted.</li> <li>• Include management actions for the stockpiles in Section 4 of the AQNAMP as well as Table 5-2, and Table 5-3.</li> <li>• Define the management action trigger levels for both the 24-hour and annual averaging periods for all species (Table 5-1, Table 5-2, and Table 5-3).</li> <li>• Define the frequency at which air quality and meteorological data is reviewed that allows for timely response for implementation of corrective actions in response to exceedances of triggers.</li> <li>• Include details on how the air quality data and meteorological data will be analyzed together during the investigation of exceedance of trigger levels and necessary management actions.</li> <li>• Confirm the trigger levels for dustfall and include corrective actions associated with collected dustfall data.</li> <li>• Include 24-hour and annual Total Suspended Particulate data in the dustfall management action trigger levels and describe how it will be used as a tool for determining potential causes of elevated dustfall.</li> <li>• Include the wind roses from onsite meteorological</li> </ul>	NA	This commitment will be implemented post PC approval
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**Commented [A19]:** ECCC: ECCC has reviewed and is okay with the proposed wording

					<p>stations, maps showing where these potential monitoring stations are located, discussion on the rational for the site locations, and discussion on how emissions from the stockpiles would be captured by these monitoring stations. The recommendations outlined above will be captured in a management plan update register, which Baffinland will use to track changes and additions to management plans committed to during the final review of the Phase 2 Proposal. Baffinland suggests that this register, submitted to the Board on the record before the close of the Public Hearing, is a more appropriate means of ensuring the requested updates to the AQNAMP are made, that an amendment to an existing Term and Condition. <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></p>		
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72	ECCC-FC4	ECCC	Marine Environment	01 - November 2019 - Public Hearing	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.	NA	Replaced by ECCC-01 NEW Commitment
71	ECCC-FC-5	ECCC	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
70	ECCC-FC6 WWF-FWS 06	ECCC	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 2024-25 shipping season.	NA	This commitment will be implemented post PC approval
60	HC-FC-01	HC	Socio-economic Environment	01 - November 2019 - Public Hearing	Baffinland commits to investigate and implement NOX reductions measures, where feasible, and report on this in the 2021 annual air quality report (to be submitted by March 31, 2021).	NA	This commitment will be implemented post PC approval

**Commented [A20]:** ECCC: As per the comment, the commitment will be implemented post-PC approval and therefore the dates need to be updated

59	HC-FC-02	HC	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. Baffinland commits to:</p> <ul style="list-style-type: none"> <li>• 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.</li> <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 : <ul style="list-style-type: none"> <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> </ul> </li> <li>• Update Air Quality and Noise Abatement Management Plan with the proposed changes. 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."</li> </ul>	NA	This commitment will be implemented post PC approval
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58	HC-FC-03	HC	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
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40	NRCan-01	NRCan	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
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39	NRCan-02	NRCan	Terrestrial Environment	01 - November 2019 - Public Hearing	Baffinland commits to: · 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. · 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. · 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. · 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.	NA	This commitment will be implemented post PC approval
38	PCA-02	PCA	Marine Environment	01 - November 2019 - Public Hearing	Baffinland commits to amend the Terms of Reference for the MEWG in collaboration with MEWG Members.	NA	This commitment will be implemented post PC approval  Resolution is pending resolution of outstanding DFO issues

37	PCA-04c	PCA	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	This commitment will be implemented post PC approval  Resolution is pending resolution of outstanding DFO issues
14	QIA-48, TC-04	QIA	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
11	TC-01	TC	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

**Commented [A21]:** Parks Canada: For ID#37, "Resolution is pending resolution of outstanding DFO issues" can be removed.

10	TC-02 DFO 3.6.5	TC	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. 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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9	TC-04	TC	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
8	TC-05	TC	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
7	TC-06	TC	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
6	TC-07	TC	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
5	TC-08	TC	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