



In the matter of the
Nunavut Land Claims Agreement,
Nunavut Land Claims Agreement Act, S.C., 1993, c. 29
Article 12, Part 5

And

In the matter of an application by
Baffinland Iron Mines Corporation
for development of the
Mary River Project Proposal
in the
Qikiqtani Region of Nunavut

NIRB PROJECT CERTIFICATE [NO.: 005]

December 28, 2012

1.0 BACKGROUND

Whereas:

A. Pursuant to the *Nunavut Land Claims Agreement (NLCA)*, the Nunavut Impact Review Board (Board or NIRB) has completed a review of the potential ecosystemic and socio-economic effects of the Mary River Project Proposal, NIRB No. 08MN053 (Mary River Project or Project);

B. The Board has considered the list of commitments made by Baffinland Iron Mines Corporation (Baffinland or the Proponent) throughout the NIRB's review and during the NIRB Final Hearing for the Project and the Board has every expectation that the Proponent will fulfill the commitments made during the Final Hearing, within its Final Environmental Impact Statement and contained within supporting documentation submitted during the review of the Project, not just the commitments that are expressly included as terms and conditions in this Project Certificate;

C. The Board has determined, pursuant to Section 12.5.5 of Article 12 of the NLCA, that, taking into account the implementation of the measures necessary to prevent or mitigate the potential adverse environmental and socio-economic effects associated with the Project and set out as terms and conditions in this Project Certificate, the Mary River Project is not likely to cause significant adverse ecosystemic and socio-economic effects;

D. The Board has found, pursuant to Section 12.5.5 of Article 12 of the NLCA and taking into account all matters relevant to its mandate including Section 12.2.5, that the Mary River Project will enhance and protect the existing and future well being of the residents and communities of the Nunavut Settlement Area;

E. The Minister of Aboriginal Affairs and Northern Development Canada has accepted the NIRB Final Hearing Report for the Mary River Project (September 2012), and the recommended terms and conditions contained in the Report that are now included in the Project Certificate; and

F. Recognizing the importance of co-ordination, integration and avoiding duplication with other monitoring requirements in permits, licences and other authorizations, the project-specific monitoring program, provided as Appendix A to this Project Certificate, will be issued in final form after key regulatory authorizations, including land use permits, water licences and mineral leases, are issued .

Now therefore, the Nunavut Impact Review Board pursuant to Section 12.5.12 of Article 12 of the Nunavut Land Claims Agreement, issues this Project Certificate for the Mary River Project to Baffinland Iron Mines Corporation, subject to the terms and conditions contained herein.

2.0 PROJECT DESCRIPTION

The Mary River Project (the Project) consists of mining iron ore from the reserve at Deposit No. 1 at a nominal production rate of 18 Million tons per year (Mt/a). The Project includes the extended exploration, construction, operation, closure, and reclamation of an open-pit mine and associated infrastructure for extraction, transportation and shipment of iron ore. There are 3 main project locations – the mine site, Milne Port north of the mine site, and Steensby Port south of the mine site. Milne Port is connected to the mine site by the Milne Inlet Tote road, approximately 100 kilometers (km) in length. A

Railway of approximately 150 kilometers (km) will be constructed to connect the Mine Site to Steensby Port.¹ For the construction period, supplies and equipment required for construction at the Mine Site and the northern portion of the Railway will be received through Milne Port. Likewise, construction equipment and supplies for Steensby Port and the southern portion of the Railway will be received at Steensby Port.

It is expected that Steensby Port facilities and the Railway will take up to four years to construct. During construction, supplies will be brought to both Milne Port and Steensby Port during the open water season. Once the Railway is operational, 18 Mt/a of iron ore will be transported by Railway and shipped from Steensby Port. Shipping of iron ore will occur year round and will require vessels with icebreaking capabilities. When Steensby Port is operational, Milne Port will only be used occasionally for the delivery of oversized equipment for the Mine Site. The main destination for the iron ore is European steel makers.²

3.0 IMPLEMENTATION

This Project Certificate is implemented by authorizing agencies in accordance with the reviewability section of the NLCA (Section 12.9.7):

“A licence, permit, certificate or other governmental approval which implements or incorporates any term or condition of a NIRB project certificate may not be called into question in a court of law on the grounds that the issuing agency thereby fettered its discretion or otherwise acted without jurisdiction, when implementing any term or condition of a NIRB project certificate.”

If the Qikiqtani Inuit Association or other Designated Inuit Organization, or person or body that would normally have standing has concerns that any term or condition is not being implemented, these parties may seek a determination before the appropriate court regarding whether or not the terms and conditions in the project certificate have been implemented.³

3.1 Overview of NIRB Monitoring Program

As set out in Sections 12.7.1 and 12.7.2 of Article 12 of the NLCA the NIRB has the jurisdiction to establish a project-specific monitoring program to: measure the ecosystemic and socioeconomic effects of a project; assess whether the project is in compliance with the prescribed project terms and conditions; share information with regulatory agencies to support the enforcement of land, water or resource use approvals and agreements; and to assess the accuracy of predictions contained in the environmental impact statements. Given the Board's application of the precautionary approach to several aspects of the assessment for this Project, in the Board's view project-specific monitoring will

¹ The proposed alignment of the Railway was provided as an exhibit at the Final Hearing; see NIRB Final Hearing File No.: 08MN053, Exhibit #3, Cover Letter and Map book From Baffinland to the Nunavut Planning Commission With Respect to the Mary River Railway Corridor On Inuit Lands, Baffinland Iron Mines Corporation, filed by Baffinland on July 16, 2012.

² For a more detailed description of the Project, see the Project Description as provided in the Final Environmental Impact Statement filed by Baffinland Iron Mines Corporation, NIRB File No.: 08MN053, February 14, 2012.

³ See Section 12.10.5 of the NLCA

play a crucial role in addressing the uncertainty regarding project effects and enabling all parties to adapt mitigation measures on an ongoing basis to ensure the Project's negative effects are prevented or limited to the extent possible.

The role of the Board with respect to the establishment of monitoring programs is to focus the terms and conditions in relation to the Project. With respect to existing or future general regional and territorial monitoring programs that may include some of the same monitoring parameters/indicators as the project-specific monitoring program, the NLCA also directs the NIRB to avoid duplication but facilitate co-ordination and integration between the project-specific monitoring programs required by the NIRB and more general programs and initiatives such as the Nunavut General Monitoring Plan.⁴ Where the requirements of regional or territorial programs are more extensive or substantively different than those established through the Project Certificate, at all times the Proponent must ensure compliance with the Project Certificate terms and conditions.

In order to co-ordinate, integrate and avoid duplication with other monitoring programs, but also to ensure that the NIRB's project-specific monitoring program yields the information required to measure effects and adequately assess compliance with terms, conditions, regulatory instruments and agreements, the NIRB's monitoring program will continue to be developed through consultation with responsible authorities, the resource and land owners and the proponent as the remaining regulatory instruments for the Project are developed. Following the issuance of the Project Certificate by the NIRB, the framework for a project-specific monitoring program will be developed and will be provided in draft form as Appendix A to the Project Certificate. As noted in the Preamble, this framework cannot be issued in final form until key regulatory authorizations, including land use permits, water licences, mineral leases, etc. are issued so that the monitoring program supplements and supports but does not duplicate the monitoring requirements in regulatory and land use instruments. Prior to finalization, the Proponent will be required to comply with all aspects of the draft framework as directed by the NIRB.

3.2 General Principles of Interpretation Applicable to Terms and Conditions:

In order to view the project-specific terms and conditions set out within this Project Certificate in the appropriate context, the following general principles of interpretation apply to the Project Certificate in its entirety, with all terms and conditions being interpreted in accordance with:

- a. The NIRB's Final Hearing Report (namely NIRB File No.: 08MN053, Final Hearing Report for the Mary River Project Proposal, September 14, 2012 available from the NIRB's registry);
- b. The rights, responsibilities, authorities and jurisdiction granted under the Nunavut Land Claims Agreement (NLCA);
- c. The limits and obligations imposed under laws of general application applicable to the Proponent or any party referred to in the term and condition, as those laws may be amended over time (e.g. privacy legislation, worker's health and safety, etc.);
- d. The specific jurisdictional and policy limits applicable to authorizing agencies, Nunavut Tunngavik Incorporated, the Qikiqtani Inuit Association, or other regulatory authority with jurisdiction in respect of the Project;

⁴ See the discussion in Section 5.10.3 of the report and Sections 12.7.4 and 12.7.5 of the NLCA.

- e. Where terms and conditions include specific references to items that must be taken into consideration or included in work plans, etc. these specific references are intended to establish minimum expectations but are not intended to limit the Proponent or prevent the Proponent from undertaking additional measures beyond those expressly prescribed in such terms and conditions; and
- f. As noted in the Final Hearing Report, for those items where a more stringent version of the precautionary principle has been applied, it is the Board's expectation that the adaptive management strategies chosen will be highly responsive to early warning signs that risks may materialize, and that rather than waiting for impacts to be noted before mitigation measures are triggered, thresholds and triggers will be set to require responses long before adverse impacts are likely.

3.3 Format of Terms and Conditions:

Wherever possible, the NIRB has used the following format for the project-specific terms and conditions set out within this Project Certificate, so as to provide clear direction on the intended application, objectives and reporting requirements:

Category: Identifies the relevant environmental component or project activity to which the term and condition applies. Wherever possible categories have been labelled so as to directly associate back to the Final Environmental Impact Statement and Environmental Impact Statement Guidelines prepared for the Project.

Responsible Parties: Identifies the parties responsible for implementation of the term and condition. While this is generally the Proponent, at times other agencies have been implicated as appropriate.

Project Phase: Identifies the phase(s) of Project development to which the term and condition is applicable. Project phase may include any one or more of the following:

- Construction – includes site preparation and staging of materials and equipment in advance of construction
- Operations
- Temporary Closure /Care and Maintenance
- Closure and Post-Closure Monitoring – includes abandonment, decommissioning and reclamation

Objective: Provides a short description of the impact or effect being mitigated. Where relevant, expectations regarding the timing for when terms and conditions will be deemed to be satisfied (i.e. sunset clause), who has discretion for determining it is satisfied has been provided.

Term or Condition: Provides specific direction on the required action or follow up. In most instances the NIRB has endeavoured to use generalized wording to allow for maximum flexibility in achieving the stated objective, however more explicit direction has been provided where deemed necessary.

Reporting Requirements: Sets out any specific reporting parameters required to measure achievement of objectives or to demonstrate compliance, as well as the required frequency of reporting.

Consideration will be given to coordination of Project Certificate reporting requirements with reporting requirements as established by other regulatory instruments associated with the Project.

It should be noted that, for some of the recommended terms and conditions, a non-binding **Commentary** section has also been added following the specific term and condition as an aid to interpretation. The Commentary section reflects clarification of the term and condition, recording the common understanding and interpretation resulting from discussions and guidance provided at the Project Certificate Workshop held in Iqaluit on December 18-19, 2012. The Commentary section is offered as a reference only and is not legally binding; in the event of a conflict between the wording in the Project Certificate and the clarification provided in the Commentary, the express wording of the Project Certificate prevails.

3.4 Flexibility

It is acknowledged that the NIRB's monitoring program will have varying requirements over the course of the Project lifecycle, and that monitoring requirements will apply from construction to eventual abandonment and reclamation. In areas where there may be a need for flexibility in relation to the terms and conditions of the Project Certificate or their application, the NIRB has endeavoured to reflect this in the associated language and/or acknowledge that objectives may be achieved through various means.

The NIRB retains the ability to give additional clarification or direction on an ongoing basis through its Monitoring Officer, with respect to compliance requirements for the Project. Upon request by the Proponent or other parties, the NIRB can provide additional clarification or direction regarding implementation of Project Certificate terms and conditions.

Where the objective of a Project Certificate term or condition can be achieved through more efficient alternate means, the Proponent is encouraged to consult with the NIRB (and other parties as required) to seek acceptance of proposed alternatives.

The NIRB has the authority to reconsider the terms and conditions of the Project Certificate to ensure that the terms and conditions are achieving their purpose. Clearly the NIRB expects the Proponent to meet its obligations under this Project Certificate, however, the NIRB may revisit the Project Certificate if the NIRB determines that the terms and conditions are not achieving their purpose. In the event that the monitoring program needs to be modified to better achieve its purpose, the Board, the Proponent, the Designated Inuit Organization or other interested parties may cause the Board, under Section 12.8.2 of the NLCA to revisit the monitoring program, or any other terms and conditions in the Project Certificate.

3.5 Enforcement

As noted in Section 12.10.3, where the terms and conditions of the Project Certificate are implemented or incorporated by reference into permits, certificates, licences or other governmental approvals, the enforcement of the terms and conditions included in that authorization remains with the agency responsible for the authorization (i.e. Authorizing Agency). In addition, under Part 8, Article 12 of the NLCA, if the Board determines that these terms and conditions are not achieving their purpose for any

reason, including instances of significant non-compliance, the NIRB may revisit the terms and conditions contained in the Project Certificate.

3.6 Proponent Commitments

A listing of commitments confirmed by the parties at the Final Hearing was provided within the NIRB's Final Hearing Report for the Project as Appendix A.⁵ Although some of these commitments have provided the basis for the terms and conditions set out in the Project Certificate, others, due to various reasons, such as limits on the NIRB's jurisdiction, have not been expressly included as terms and conditions in the Project Certificate. However, as noted in the Preamble to the Certificate, even for those commitments that are not included in the Project Certificate, recognizing the importance of honouring commitments to the credibility of the Board's assessment process, it is the Board's expectation that **all parties** will make best efforts to fulfill the commitments referenced in the Final Hearing, including the listing provided as Exhibit #64⁶ and the listing in Appendix A: Table of Commitments attached to the Final Hearing Report.

To support transparency and accountability associated with the Proponent's commitments, the Board requests that the Proponent provide, in an annual report to the NIRB, a summary of the status of the Proponent's progress with respect to meeting the commitments set out in Appendix A of the Final Hearing Report.

4.0 PROJECT-SPECIFIC TERMS AND CONDITIONS

4.1 General

NIRB Monitoring Responsibilities

1. The NIRB will appoint Monitoring Officers as required to monitor the Project in accordance with the purpose of a monitoring program as set out in section 12.7.2 of the Nunavut Land Claims Agreement for the full life of the Project, including closure and restoration. Subject to direction from the NIRB, the responsibilities of the NIRB Monitoring Officers will include:
 - a. Providing direction to the Proponent, the Terrestrial and Marine Environment Working Groups, regulatory agencies, and the Qikiqtaaluk Socio-Economic Monitoring Committee to supply NIRB with reports and information respecting the Project's operations, impacts and the implementation of mitigative measures;
 - b. Conducting a periodic evaluation of the monitoring program for the Project;

⁵ NIRB File No.: 08MN053, Final Hearing Report for the Mary River Project Proposal, September 14, 2012, Appendix A: Table of Commitments from the Final Hearing, at pp. A-1-A-20.

⁶ NIRB Final Hearing File No.: 08MN053, Exhibit 64, Baffinland Iron Mines Corporation, Commitments made in response to recommendations of the Government of Nunavut, Pond Inlet, July 28, 2012, filed by Baffinland on July 28, 2012.

- c. Compiling a report on the adequacy of the monitoring program and on the ecosystemic and socio-economic impacts of the Project; and
 - d. Where appropriate, recommending to the NIRB reconsideration of Project Certificate Terms and Conditions in accordance with section 12.8.2 of the Nunavut Land Claims Agreement.
- 2. The NIRB will report annually (in English and Inuktitut) on the results of its Monitoring Program for the Project.
- 3. The NIRB will schedule periodic updates regarding its Monitoring Program for the communities most affected by the Project.
- 4. The NIRB Monitoring Officers will schedule periodic site inspections at the Project, coordinating with other regulatory agencies to the extent possible.

General Regulatory Requirements

- 5. The Proponent must obtain all required federal and territorial permits and other approvals, and shall comply with the requirements of such regulatory instruments.
- 6. The Proponent shall take prompt and appropriate action to remedy any occasion of non-compliance with environmental laws and regulations and/or regulatory instruments, and shall report any non-compliance as required by law immediately. A description of all instances of non-compliance and associated follow up is to be reported annually to the NIRB.
- 7. The Proponent shall meet with respective licensing authorities prior to the commencement of construction to discuss the posting of adequate performance bonding. Licensing authorities are encouraged to take every measure to require that sufficient security is posted before construction begins.

Monitoring Records

- 8. All monitoring information collected pursuant to the Project Certificate and various regulatory requirements for the Project shall contain the following information:
 - a. The name of the person(s) who performed the sampling or took the measurements including any relevant accreditations;
 - b. The date, time and place of sampling or measurement, and weather conditions;
 - c. The date of analysis;
 - d. The name of the person(s) who performed the analysis including any relevant accreditations;
 - e. A description of the analytical methods or techniques used; and
 - f. A discussion of the results of any analysis.
- 9. The Proponent shall make its monitoring results available, to the fullest extent possible, in English and Inuktitut.
- 10. The Proponent shall keep and maintain the records, including results, of all Project-related monitoring data and analysis for the life of the Project, including closure and post-closure monitoring.

11. The Proponent shall maintain the Final Environmental Impact Statement and the Environmental Effects Monitoring program developed for the Project, with predictions updated as new baseline data is collected.
12. The Proponent shall establish a Project-specific web portal or web page as a means of making all non-confidential monitoring and reporting information associated with the Project available to the general public. This does not limit what the Proponent may be required to submit to the NIRB or other regulatory authorities to meet reporting requirements.

4.2 Ecosystemic Terms and Conditions

Meteorology and Climate (including Climate Change)

Term and Condition No.	1
Category:	Meteorology and Climate – Climate Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the impacts that climate change might be having on the port facilities.
Term or Condition:	The Proponent shall use GPS monitoring or a similar means of monitoring at both port sites and will also use tide gauges at the Steensby Port site to monitor the relative sea levels and storm surges at these sites.
Reporting Requirements:	The Proponent shall summarize and supply these monitoring results to NIRB in the annual project report.

Term and Condition No.	2
Category:	Meteorology and Climate – Climate Change Validation and Studies
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide feedback on the impacts that climate change might be having on the Project.
Term or Condition:	The Proponent shall provide the results of any new or revised assessments and studies done to validate and update climate change impact predictions for the Project and the effects of the Project on climate change in the Local Study Area and Regional Study Area as defined in the Proponent's Final Environmental Impact Statement.
Reporting Requirements:	The Proponent shall provide new or revised assessments and studies to the NIRB, the affected communities, relevant regulatory authorities, and interested parties.

Term and Condition No.	3
Category:	Meteorology and Climate – Green House Gas Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To confirm that the Proponent is exploring and implementing concrete steps to reduce greenhouse gases.
Term or Condition:	The Proponent shall provide interested parties with evidence of continued initiatives undertaken to reduce greenhouse gas emissions.
Reporting Requirements:	The Proponent shall include relevant information in the Annual Report submitted to the NIRB.

Term and Condition No.	4
Category:	Climate Change – Consultation on Climate
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To promote public awareness and engagement of affected groups.
Term or Condition:	The Proponent shall endeavour to include the participation of Inuit from affected communities and other communities in Nunavut when undertaking climate-change related studies and research.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	5
Category:	Meteorology and Climate – Weather Monitoring Data
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide families of employees with up to date information.
Term or Condition:	The Proponent shall endeavour to explore and implement reasonable measures to ensure that weather-related information for the various Project sites is readily accessible to the public on a continual basis throughout the life of the Project
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	6
Category:	Meteorology and Climate – Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall provide the results of any emissions calculations

	conducted to determine the level of sulphur dioxide (SO ₂) emissions, nitrogen oxide (NO _x) emissions and greenhouse gases generated by the Project using fuel consumption or other relevant criteria as a basis.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Air Quality

Term and Condition No.	7
Category:	Air Quality – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall update its Air Quality and Noise Abatement Management Plan to include an expanded regional study area and provide for land-based monitoring stations designed to capture operations phase ship-generated SO ₂ and NO ₂ emissions through Foxe Basin and along the Hudson Strait.
Reporting Requirements:	The updated plan shall be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

***Commentary:** It is anticipated that continuous monitoring rather than passive monitoring will be required at the land-based monitoring stations to identify if hourly exceedances occur.*

Term and Condition No.	8
Category:	Air Quality – Greenhouse Gas Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the Project's emissions.
Term or Condition:	The Proponent shall demonstrate through monitoring of air quality at the mine site and at the Steensby Inlet Port site that SO ₂ and NO ₂ emissions remain within predicted levels and, where applicable, within limits established by all applicable guidelines and regulations. In cases where exceedances are manifested, the Proponent shall provide an explanation for the exceedance, a description of planned mitigation, and shall conduct additional monitoring to evaluate the effectiveness of mitigative measures.
Reporting Requirements:	To be included in the Proponent's annual reporting to the NIRB.

Term and Condition No.	9
Category:	Air Quality – Greenhouse Gas Emissions
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To provide feedback on the Project's emissions.

Term or Condition:	The Proponent shall provide calculations of greenhouse gas emissions generated by activities at the Steensby Inlet port and other Project sources including aircraft associated with the Project. Calculations shall take into consideration, fuel consumption as measured by Baffinland's purchase and use as well as the fuel use of its contractors and sub-contractors.
Reporting Requirements:	To be included in the Proponent's annual reporting to the NIRB.

Term and Condition No.	10
Category:	Air Quality –Dust Management and Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to air quality from dust dispersion.
Term or Condition:	<p>The Proponent shall update its Dust Management and Monitoring Plan to address and/or include the following additional items:</p> <ul style="list-style-type: none"> a) Outline the specific plans for monitoring dust along the first few kilometres of the rail corridor leaving the Mary River mine site. b) Identify the specific adaptive management measures to be considered should monitoring indicate that dust deposition from trains transporting along the rail route is greater than initially predicted.
Reporting Requirements:	To be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	11
Category:	Air Quality – Incineration Management Plan
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to air quality from incineration activities.
Term or Condition:	The Proponent shall develop and implement an Incineration Management Plan that takes into consideration the recommendations provided in Environment Canada's Technical Document for Batch Waste Incineration (2010).
Reporting Requirements:	Updated Incineration Management Plan to be provided to the NIRB at least 60 days prior to the commencement of construction activities.

Term and Condition No.	12
Category:	Air Quality – Incineration
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to air quality from incineration activities.
Term or Condition:	Prior to commencing any incineration of on-site Project wastes, the Proponent shall conduct at least one stack test immediately following the commissioning of each temporary and permanent incinerator.

Reporting Requirements:	Stack test results to be reported to the NIRB and Environment Canada annually as required.
--------------------------------	--

Noise and Vibration

Term and Condition No.	13
Category:	Noise and Vibration-Use of Explosives
Responsible Parties:	The Proponent, Fisheries and Oceans Canada
Project Phase:	Construction
Objective:	To determine appropriate protection of fish and aquatic life in the Arctic.
Term or Condition:	The Proponent is encouraged to work with Fisheries and Oceans Canada at the regulatory phase and to take a precautionary approach when selecting the overpressure threshold to be applied to explosives use for the protection of fish and aquatic life.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	14
Category:	Noise and Vibration- Noise and Vibration Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate noise and vibration at Project sites, especially living areas.
Term or Condition:	The Proponent shall conduct noise and vibration monitoring at Project accommodations sites located at the Mary River mine site, Steensby Inlet Port site, and Milne Inlet Port site. Sampling shall be undertaken during the summer and winter months during all phases of Project development.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	15
Category:	Noise and Vibration- Noise and Vibration Monitoring
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, local Hamlet organizations
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enhance public safety when travelling around the Project area.
Term or Condition:	The Proponent shall collaborate to the extent possible with the Qikiqtani Inuit Association and local Hamlet organizations when undertaking consultation with all affected communities regarding railway operations. During these consultations, it is recommended that the Proponent provide information including video, audio, and photographic representation as well as any other aids (i.e. models) that may enhance the general public's understanding of railway operations, as well as all safety considerations for members of the public who may be travelling around the project area.

Reporting Requirements:	To be developed following approval of the Project by the Minister.
--------------------------------	--

Hydrology and Hydrogeology

Term and Condition No.	16
Category:	Hydrology and Hydrogeology – Water Infrastructure
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To provide assurance that the potential impacts to flow and quantity of water in the Project area are minimized.
Term or Condition:	The Proponent shall ensure that the water related infrastructure or facilities that are designed and constructed, including the modification of culverts, diversion of watercourses, and diversion of runoff into watercourses along the railway, access roads, the Milne Tote Road, and other areas of the Project site, are consistent with those proposed in the FEIS in terms of type, location, and scope and that the requirements of all relevant regulatory authorities are satisfied advance of constructing those facilities.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: It is understood that the term “consistent with those proposed in the FEIS” requires general consistency only in relation to the type, location and scope of this infrastructure and facilities, but does not limit the ability of the Proponent to refine and optimize the design, placement and construction as may become necessary to reflect site-specific conditions encountered during construction.

Term and Condition No.	17
Category:	Hydrology and Hydrogeology – Effluent Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to water bodies from effluent.
Term or Condition:	The Proponent shall develop and implement effective measures to ensure that effluent from project-related facilities and/or activities, including sewage treatment plants, ore stockpiles, and mine pit, satisfies all discharge criteria requirement established by the relevant regulatory agencies prior to being discharged into the receiving environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	18
Category:	Hydrology and Hydrogeology – Pit Lake Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring

Objective:	To enhance predictions for mine site closure conditions.
Term or Condition:	The Proponent shall carry out continued analyses over time to confirm and update, accordingly, the approximate fill time for the mine pit lake identified in the FEIS.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	19
Category:	Hydrology and Hydrogeology – Water Infrastructure Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to natural water flow.
Term or Condition:	The Proponent shall ensure that it develops and implements adequate monitoring and maintenance procedures to ensure that the culverts and other conduits that may be prone to blockage do not significantly hinder or alter the natural flow of water from areas associated with the proposed mine. In addition, the Proponent shall monitor, document and report the withdrawal rates for water removed and utilized for all domestic and industrial purposes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Groundwater/Surface Waters

Term and Condition No.	20
Category:	Groundwater/Surface Waters - Explosives
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure that the effects associated with the manufacturing, storage, transportation and use of explosives do not negatively impact the areas surrounding the Project.
Term or Condition:	The Proponent shall monitor the effects of explosives residue and related by-products from project-related blasting activities as well as develop and implement effective preventative and/or mitigation measures, including treatment, if necessary, to ensure that the effects associated with the manufacturing, storage, transportation and use of explosives do not negatively impact the Project and surrounding areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	21
Category:	Groundwater/Surface Waters – Aquatic Effects Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Construction

Objective:	To mitigate potential impacts to surface and ground waters.
Term or Condition:	The Proponent shall ensure that the scope of the Aquatic Effects Monitoring Plan (AEMP) includes, at a minimum, monitoring of non-point sources of discharge, selection of appropriate reference sites, measures to ensure the collection of adequate baseline data and the mechanisms proposed to monitor and treat runoff, and sample sediments.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	22
Category:	Groundwater/Surface Waters – Sediment and Erosion Management Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To develop appropriate sediment and erosion controls to prevent impacts to surface waters.
Term or Condition:	The Proponent shall develop a detailed Sediment and Erosion Management Plan to prevent and/or mitigate sediment loading into surface water within the Project area.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	23
Category:	Groundwater/Surface Waters – Groundwater Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to groundwater quality.
Term or Condition:	The Proponent shall develop and implement a Groundwater Monitoring and Management Plan to monitor, prevent and/or mitigate the potential effects of the Project on groundwater within the Project area.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	24
Category:	Groundwater/Surface Waters – Effluent Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to groundwater and surface waters from effluent discharge.
Term or Condition:	The Proponent shall monitor as required the relevant parameters of the effluent generated from Project activities and facilities and shall carry out treatment if necessary to ensure that discharge conditions are met at all times.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Landforms, Geology and Geomorphology, Soils and Permafrost

Term and Condition No.	25
Category:	Landforms – Additional Geotechnical Investigations
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to sensitive landforms.
Term or Condition:	The Proponent shall undertake the additional geotechnical investigations to identify sensitive landforms, modify engineering design for Project infrastructure, develop and implement preventative and/or mitigation and monitoring measures to minimize the impacts of the Project's activities and infrastructure on sensitive landforms.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	26
Category:	Landforms and Soils – Erosion Management Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To develop appropriate measures for preventing destabilization and erosion.
Term or Condition:	The Proponent shall develop and implement a comprehensive erosion management plan to prevent or minimize the effects of destabilization and erosion that may occur due to the Project's construction and operation.
Reporting Requirements:	Plan to be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Term and Condition No.	27
Category:	Landforms, Geology and Geomorphology – Natural Aesthetics
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to natural aesthetics.
Term or Condition:	The Proponent shall include within its public consultation report information related to the sentiments expressed by affected communities about the impacts that changes to the topography and landscape have had on the aesthetic value of the Project area.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	28
Category:	Landforms, Geology and Geomorphology – Permafrost
Responsible Parties:	The Proponent

Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure that permafrost integrity is maintained.
Term or Condition:	The Proponent shall monitor the effects of the Project on the permafrost along the railway and all other Project affected areas and must implement effective preventative measures to ensure that the integrity of the permafrost is maintained.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	29
Category:	Landforms, Geology and Geomorphology – Design Plans
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To confirm constructed components meet design as assessed.
Term or Condition:	The Proponent shall provide to the respective regulatory authorities, for review and acceptance, for-construction engineering design and drawings, specifications and engineering analysis to support design in advance for constructing those facilities. Once project facilities are constructed, the Proponent shall provide copies of the as-built drawings and design to the appropriate regulatory authorities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Commentary: “Acceptance” by a regulatory authority of for-construction engineering design and drawings, specifications and engineering analysis merely indicates that the authority has received the documentation but does not imply that the authority has approved the design, drawings, specifications or analysis received.

Term and Condition No.	30
Category:	Landforms, Geology and Geomorphology – Quarries
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To provide oversight on quarry design and management.
Term or Condition:	The Proponent shall develop site-specific quarry operation and management plans in advance of the development of any potential quarry site or borrow pit.
Reporting Requirements:	Plans to be provided to the NIRB for review and comment at least 30 days prior to commencement of construction activities.

Vegetation

Term and Condition No.	31
Category:	Vegetation – Construction and Operations
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To minimize impacts to vegetation.
Term or Condition:	The Proponent shall ensure that Project activities are planned and conducted in such a way as to minimize the Project footprint.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	32
Category:	Vegetation – Construction and Operations
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent introduction of invasive species.
Term or Condition:	The Proponent shall ensure that equipment and supplies brought to the Project sites are clean and free of soils that could contain plant seeds not naturally occurring in the area. Vehicle tires and treads in particular must be inspected prior to initial use in Project areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	33
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To facilitate monitoring.
Term or Condition:	The Proponent shall include relevant Monitoring and Management Plans within its Environmental Management System, Terrestrial Environment Management and Monitoring Plan (TEMMP).
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB .

Term and Condition No.	34
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To determine baseline metal levels of soils used by berry-producing plants.
Term or Condition:	The Proponent shall conduct soil sampling to determine metal levels of soils

	in areas with berry-producing plants near any of the potential development areas, prior to commencing operations.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	35
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent, local Hunters and Trappers Organizations
Project Phase:	Construction and Operations
Objective:	To determine baseline metal levels in foraging caribou.
Term or Condition:	The Proponent shall undertake monitoring of baseline metal levels in organ tissue from caribou harvested within the local study area, prior to commencing operations. The Proponent is strongly encouraged to coordinate with local Hunters and Trappers Organizations regarding procurement of harvested caribou organs.
Reporting Requirements:	To be developed following approval of the Project by the Minister

***Commentary:** It is anticipated that the Terrestrial Environment Working Group members will provide guidance to the Proponent on the specific tissues studied, the methods for testing and mechanics of obtaining samples.*

Term and Condition No.	36
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations
Objective:	To monitor for project-induced effects to foraging caribou.
Term or Condition:	The Proponent shall establish an on-going monitoring program for vegetation species used as caribou forage (such as lichens) near Project development areas, prior to commencing operations.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB .

Term and Condition No.	37
Category:	Vegetation – Monitoring
Responsible Parties:	The Proponent, Government of Nunavut Department of Environment
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent establishment of invasive species.
Term or Condition:	The Proponent shall incorporate protocols for monitoring for the potential introduction of invasive vegetation species (e.g. surveys of plant populations in previously disturbed areas) into its Terrestrial Environment and Monitoring Plan. Any introductions of non-indigenous plant species must be promptly reported to the Government of Nunavut Department of Environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	38
Category:	Vegetation – Adaptive Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to vegetation abundance, diversity and health.
Term or Condition:	The Proponent shall review, on an annual basis, all monitoring information and the vegetation mitigation and management plans developed under its Environmental Management System, Terrestrial Environment and Monitoring Plan (TEMMP) and adjust such plans as may be required to effectively prevent or reduce the potential for significant adverse project effects on vegetation abundance, diversity and health.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB .

Term and Condition No.	39
Category:	Vegetation – Reclamation and Revegetation
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent erosion and promote progressive revegetation of disturbed areas.
Term or Condition:	The Proponent shall develop a progressive revegetation program for disturbed areas that are no longer required for operations, such program to incorporate measures for the use of test plots, reseeding and replanting of native plants as necessary. It is further recommended that this program be directly associated with the management plans for erosion control established for the Project.
Reporting Requirements:	To be provided to the NIRB for review and comment at least 60 days prior to commencement of construction activities.

Commentary: It is understood that revegetation may not be possible for all those areas disturbed by project development, and that the requirements of progressive revegetation are in relation to only those “disturbed areas” that had vegetative cover prior to project development.

Term and Condition No.	40
Category:	Vegetation – Reclamation and Revegetation
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent erosion and promote progressive revegetation of disturbed areas.
Term or Condition:	The Proponent shall include revegetation strategies in its Site Reclamation Plan that support progressive reclamation and that promote natural

	revegetation and recovery of disturbed areas compatible with the surrounding natural environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: *It is understood that revegetation may not be possible for all those areas disturbed by project development, and that the requirements of progressive revegetation are in relation to only those “disturbed areas” that had vegetative cover prior to project development.*

Freshwater Aquatic Environment including Biota and Habitat

Term and Condition No.	41
Category:	Freshwater Aquatic Environment – Setbacks
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts of runoff into freshwater aquatic habitat.
Term or Condition:	Unless otherwise approved by regulatory authorities, the Proponent shall maintain a minimum 100-metre naturally-vegetated buffer between the high-water mark of any fish-bearing water bodies and any permanent quarries with potential for acid rock drainage or metal leaching.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	42
Category:	Freshwater Aquatic Environment – Setbacks
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts of runoff into freshwater aquatic habitat.
Term or Condition:	The Proponent shall maintain minimum a 30-metre naturally-vegetated buffer between the mining operation and adjacent water bodies.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: *As used in the above Term and Condition, “mining operation” is intended to include the site of active ore removal, including excavations resulting from the extraction of ore but does not include quarries, transportation corridors or other mine infrastructure.*

Term and Condition No.	43
Category:	Freshwater Aquatic Environment – Drainage
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts of runoff into freshwater aquatic habitat.
Term or Condition:	Prior to the start of construction, the Proponent must submit a Site

	Drainage and Silt Control Plan to the appropriate regulatory authorities for approval.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	44
Category:	Freshwater Aquatic Environment – Explosives
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts of explosives on freshwater aquatic habitat.
Term or Condition:	The Proponent shall meet or exceed the guidelines set by Fisheries and Oceans Canada for blasting thresholds and implement practical and effective measures to ensure that residue and by-products of blasting do not negatively affect fish and fish habitat.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	45
Category:	Freshwater Aquatic Environment – General
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to freshwater aquatic habitat.
Term or Condition:	The Proponent shall adhere to the No-Net-Loss principle at all phases of the project to prevent or mitigate direct or indirect fish and fish habitat losses.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	46
Category:	Freshwater Aquatic Environment – Drainage
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate impacts to freshwater aquatic habitat.
Term or Condition:	The Proponent shall ensure that runoff from fuel storage and maintenance facility areas, sewage and wastewater other facilities responsible for generating liquid effluent and runoff meet discharge requirements.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	47
Category:	Freshwater Aquatic Environment – Watercourses
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent blockages or restrictions to fish passage.

Term or Condition:	The Proponent shall ensure that all Project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams and rivers.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	48
Category:	Freshwater Aquatic Environment – Explosives
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Fisheries and Oceans Canada
Project Phase:	Construction, Operations
Objective:	To mitigate impacts to freshwater aquatic habitat.
Term or Condition:	The Proponent shall engage with Fisheries and Oceans Canada and the Qikiqtani Inuit Association in exploring possible Project specific thresholds for blasting that would exceed the requirements of Fisheries and Oceans Canada's <i>Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters</i> (D.G. Wright and G.E. Hopky, 1998).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Terrestrial Wildlife and Habitat

Term and Condition No.	49
Category:	Terrestrial Wildlife and Wildlife Habitat – Terrestrial Environment Working Group
Responsible Parties:	The Proponent, the Qikiqtani Inuit Association, the Government of Nunavut, Environment Canada, and any other agencies or interested parties as determined by the members to be appropriate
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	The TEWG will provide direction and guidance to the Proponent regarding: adding to baseline information during construction and before project operations commence; monitoring and reporting regarding effects occurring during operations; and providing advice regarding changes that may be required to make sure the management of negative impacts is effective and that lasting damage is prevented.
Term or Condition:	The Proponent shall establish a Terrestrial Environment Working Group ("TEWG") which will act as an advisory group in connection with mitigation measures for the protection of the terrestrial environment and in connection with its Environmental Effects Monitoring Program, as it pertains to the terrestrial environment. Members may consider the draft terms of reference for the TEWG filed in the Final Hearing, but they are not bound by them. The role of the TEWG is not intended to either duplicate or to affect the exercise of regulatory authority by appropriate government agencies and departments.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	50
Category:	Terrestrial Wildlife and Habitat - General
Responsible Parties:	The Proponent and other Parties as appropriate
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure appropriate and responsive adaptive management.
Term or Condition:	The Proponent shall continue to develop and implement Project-specific monitoring for the terrestrial environment, and will demonstrate appropriate refinements to design, incorporation of analytical methods and elaboration of methodologies. The monitoring plan shall contain clear thresholds to allow for the assessment of long-term trends and cumulative effects where project interactions are identified. Coordination and cooperation will be required where data collection, analysis and interpretation, or responsibility for mitigation and management requires the efforts of multiple parties (e.g., government, Qikiqtani Inuit Association, communities).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	51
Category:	Terrestrial Wildlife and Habitat - General
Responsible Parties:	The Proponent and/or TWEG
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To promote coordination of monitoring efforts.
Term or Condition:	The Proponent, either directly or as part of the TEWG, shall consider and, where appropriate, cooperate with relevant regional and/or community-based monitoring initiatives that raise issues or produce information pertinent to mitigating project-induced impacts.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	52
Category:	Terrestrial Wildlife and Habitat - Caribou
Responsible Parties:	The Proponent, TEWG
Project Phase:	Construction
Objective:	To ensure best practices are used for caribou protection.
Term or Condition:	Within 3 months of issuance of the Project Certificate, the Proponent shall initiate design, and develop the timeline to test and implement means of deterring caribou from pits and other hazardous areas. A review of best practices and techniques will be undertaken at other Northern mines where interactions with caribou occur. Considerations should include temporary ribbon placement, inuksuks, or fencing and subsequent monitoring for effectiveness. These activities shall be reported back to the Terrestrial Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister; results to

	be reported back to the Terrestrial Environment Working Group.
--	--

Term and Condition No.	53
Category:	Terrestrial Wildlife and Habitat - Caribou
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to caribou from Project-related traffic.
Term or Condition:	<p>The Proponent shall demonstrate consideration for the following:</p> <ol style="list-style-type: none"> Steps taken to prevent caribou mortality and injury as a result of train and vehicular traffic, including operational measures meant to maximize the potential for safe traffic relative to operations on the railway, Milne Inlet tote road and associated access roads. Monitoring and mitigation measures at points where the railway, roads, trails and flight paths pass through caribou calving areas, particularly during caribou calving times. Evaluation of the effectiveness of proposed caribou crossings over the railway, Milne Inlet tote road and access roads as well as the appropriate number. Development of a surveillance system along the railway corridor to identify the presence of caribou in proximity to the train tracks and operational protocols for the train to avoid collisions and enable caribou to cross the train tracks unimpeded. Protocols for documentation and reporting of all caribou collisions and mortalities, as well as mechanisms for adaptive management responses designed to prevent further such interactions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	54
Category:	Terrestrial Wildlife and Habitat - Caribou
Responsible Parties:	The Proponent
Project Phase:	Construction – within six (6) months of issuance of Project Certificate
Objective:	To Update the Terrestrial Environmental Management and Monitoring Plan
Term or Condition:	<p>The Proponent shall provide an updated Terrestrial Environmental Management and Monitoring Plan which shall include, but not be limited to the following:</p> <ol style="list-style-type: none"> Details of the methods and rationale for conducting monitoring prior to the commencement of construction; Monitoring for caribou presence and behavior during railway construction; Description and justification of statistical design or other means of determining effect and proposed analyses to support the conclusions drawn from monitoring impacts of the mine and related infrastructure on wildlife; Details of monitoring and mitigation activities, including: <ol style="list-style-type: none"> Dust fall (fugitive and Total Suspended Particulates), that

	<p>addresses methods to reduce risk to caribou forage from dust fall;</p> <p>ii. Snow track surveys during construction and the use of video-surveillance to improve the predictability of caribou exposure to the railway. Using the result of this information, an early warning system for caribou on the railway shall be developed for operation.</p> <p>e. Details of monitoring thresholds related to level of mitigation and management; and</p> <p>f. Details of a comprehensive hunter harvest survey to determine the effect on caribou populations and potential effects on caribou behaviour resulting from increased human access caused by upgrades to the Milne Inlet tote road (and any other roads if they are shifted from private to public use) and increase local knowledge of the mine site, including establishing pre-construction baseline harvesting data.</p>
Reporting Requirements:	Plan to be submitted to the NIRB and the TEWG within 6 months of issuance of a Project Certificate.

Term and Condition No.	55
Category:	Terrestrial Wildlife and Habitat - Wolves
Responsible Parties:	The Proponent, Government of Nunavut Department of Environment
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate potential impacts to wolves.
Term or Condition:	<p>The Proponent shall develop an adaptive management plan applicable to wolves and wolf habitat in collaboration with the Government of Nunavut-Department of Environment (GN-DOE) to ensure compliance with the <i>Nunavut Wildlife Act</i>. Consideration must be given to the following:</p> <p>a. Monitoring for active wolf dens within a 10 km radius from the mine site, under the direction and prior approval of the GN DOE, and reporting the results through NIRB's Annual Reports on terrestrial wildlife in the Potential Development Area (PDA);</p> <p>b. Estimating the available (glacio-fluvial materials) esker habitat within the Regional Study Area/PDA and identifying such habitat as ecologically sensitive;</p> <p>c. Developing "wolf indices" for presence/abundance of wolves (by conducting studies) to set a baseline pre-construction baseline; and</p> <p>d. Ensuring that wolf monitoring is capable of determining the relative abundance and distribution of wolves in the Project Development Area over time.</p>
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	56
Category:	Terrestrial Wildlife and Habitat – Wildlife Habitat

Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure progressive reclamation of disturbed wildlife habitat.
Term or Condition:	The Proponent shall develop a strategy for the recovery of terrestrial wildlife habitat in a progressive manner that is consistent with the <i>Nunavut Wildlife Act</i> . Overall, this will require the integration of a decision-making process and the identification of mitigation responses to cumulative impacts on caribou survival, breeding propensity, and population dynamics.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	57
Category:	Terrestrial Wildlife and Habitat - Reporting
Responsible Parties:	The Proponent
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate and monitor for impacts to wildlife.
Term or Condition:	<p>The Proponent shall report annually regarding its terrestrial environment monitoring efforts, with inclusion of the following information:</p> <ul style="list-style-type: none"> a. Description of all updates to terrestrial ecosystem baseline data; b. A description of the involvement of Inuit in the monitoring program; c. An explanation of the annual results relative to the scale of the natural variability of Valued Ecosystem Components in the region, as described in the baseline report; d. A detailed presentation and analysis of the distribution relative to mine structures and activities for caribou and other terrestrial mammals observed during the surveys and incidental sightings; e. Results of the annual monitoring program, including field methodologies and statistical approaches used to support conclusions drawn; f. A summary of the chronology and level of mine activities (such as vehicle frequency and type); g. An assessment and presentation of annual environmental conditions including timing of snowmelt, green-up, as well as standard weather summaries; and h. A discussion of any proposed changes to the monitoring survey methodologies, statistical approaches or proposed adaptive management stemming from the results of the monitoring program.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	58
Category:	Terrestrial Wildlife and Habitat - Reporting
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring

Objective:	To mitigate and monitor for impacts to wildlife.
Term or Condition:	<p>Within its annual report to the NIRB, the Proponent shall incorporate a review section which includes:</p> <ol style="list-style-type: none"> An examination for trends in the measured natural variability of Valued Ecosystem Components in the region relative to the baseline reporting; A detailed analysis of wildlife responses to operations with emphasis on calving and post-calving caribou behaviour and displacements (if any), and caribou responses to and crossing of the railway; A description of the extent of dust fall based on measured levels of dust fall (fugitive and finer particles such as TSP) on lichens and blueberries, and ash content of caribou fecal pellets; A demonstration and description of how the monitoring results contribute to cumulative effects of the project; Any proposed changes to the monitoring survey methodologies, statistical approaches or proposed adaptive management stemming from the results of the monitoring program; and Any updates to information regarding caribou migration trails. Maps of caribou migration trails, primarily obtained through any new collar and snow tracking data, shall be updated (at least annually) in consultation with the Qikiqtani Inuit Association and affected communities, and shall be circulated as new information becomes available.
Reporting Requirements:	To be included in the Annual Report submitted to the NIRB

Term and Condition No.	59
Category:	Terrestrial Wildlife and Habitat – Aircraft Disturbances
Responsible Parties:	The Proponent
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate aircraft disturbance to wildlife.
Term or Condition:	The Proponent shall ensure that aircraft maintain, whenever possible (except for specified operational purposes such as drill moves, take offs and landings), and subject to pilot discretion regarding aircraft and human safety, a cruising altitude of at least 610 metres during point to point travel when in areas likely to have migratory birds, and 1,000 metres vertical and 1,500 metres horizontal distance from observed concentrations of migratory birds (or as otherwise prescribed by the Working Group) and use flight corridors to avoid areas of significant wildlife importance.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As indicated in the heading and discussion of this section in the Final Hearing Report, the intention of this section is to mitigate aircraft disturbance to wildlife, (including, but not limited to migratory birds, although these are specifically mentioned in the term and condition). It is also anticipated that the Terrestrial Environment Working Group may provide the Proponent with additional

direction regarding minimum flight altitude requirements that may differ from these requirements. It is also noted that Term and Condition #71 prescribes a slightly more stringent minimum altitude for migratory birds and unless the Terrestrial Environment Working Group provides additional direction, the minimums set out in Condition #71 will govern with respect to migratory birds specifically.

Term and Condition No.	60
Category:	Terrestrial Wildlife and Habitat – Explosives
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate impacts to wildlife from explosives.
Term or Condition:	Prior to construction, the Proponent shall develop a detailed blasting program to minimize the effects of blasting on terrestrial wildlife that includes, but is not limited to the restriction of blasting when migrating caribou, sensitive local carnivores or birds may be negatively affected.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	61
Category:	Terrestrial Wildlife and Habitat – Operations (General)
Responsible Parties:	The Proponent, TEWG
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate Project impacts to wildlife.
Term or Condition:	Whenever practical and not causing a human safety issue, a stop work policy shall be implemented when wildlife in the area may be endangered by the work being carried out. An operational definition of 'endangered' shall be provided by the Terrestrial Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	62
Category:	Terrestrial Wildlife and Habitat – Operations (General)
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent increased harvesting pressure on wildlife.
Term or Condition:	The Proponent shall prohibit project employees from transporting firearms to site and from operating firearms in project areas for the purpose of wildlife harvesting.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	63
Category:	Terrestrial Wildlife and Habitat – Public Engagement
Responsible Parties:	The Proponent, local Hunters and Trappers Organizations
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance,

	Closure and Post-Closure Monitoring
Objective:	To keep communities up to date with Project operations.
Term or Condition:	The Proponent shall liaise with local Hunters and Trappers Organizations in advance of carrying out terrestrial wildlife surveys. At a minimum, The Proponent shall also meet annually in person with Hunters and Trappers Organizations to discuss wildlife monitoring and mitigation plans and address community concerns regarding wildlife interactions. The Proponent may be required to facilitate these meetings through payment of honoraria and meeting costs.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	64
Category:	Terrestrial Wildlife and Habitat – Waste Management
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent human-carnivore interactions.
Term or Condition:	<p>The Proponent shall ensure that its Environment Protection Plan incorporates waste management provisions to prevent carnivores from being attracted to the Project site(s). Consideration must be given to the following measures:</p> <ul style="list-style-type: none"> a. Installation of an incinerator beside the kitchen that will help to keep the food waste management process simple and will minimize the opportunity for human error (i.e. storage of garbage outside, hauling in a truck (odours remain in truck), hauling some distance to a landfill site, incomplete combustion at landfill, fencing of landfill, etc.); and b. Installation of solid carnivore-proof skirting on all kitchen and accommodation buildings (i.e., heavy-duty steel mesh that would drop down from the edge of the buildings/trailers and buried about a half meter into the ground to prevent animals from digging under the skirting).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: The use of the phrase “consideration must be given” requires that if the Proponent chooses not to implement the suggested measures, the Proponent must provide an indication of the rationale for not implementing the suggested measure and for choosing an alternative measure.

Birds

Term and Condition No.	65
Category:	Birds – Awareness
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance,

	Closure and Post-Closure Monitoring
Objective:	To prevent disturbance to birds and bird habitat.
Term or Condition:	The Proponent shall ensure all employees working at project sites receive awareness training regarding the importance of avoiding known nests and nesting areas and large concentrations of foraging and moulting birds.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	66
Category:	Birds – Species at Risk
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to sensitive bird species.
Term or Condition:	If Species at Risk or their nests and eggs are encountered during Project activities or monitoring programs, the primary mitigation measure must be avoidance. The Proponent shall establish clear zones of avoidance on the basis of the species-specific nest setback distances outlined in the Terrestrial Environment Management and Monitoring Plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	67
Category:	Birds – Species at Risk
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to sensitive bird species.
Term or Condition:	The Proponent shall ensure that the mitigation and monitoring strategies developed for Species at Risk are updated as necessary to maintain consistency with any applicable status reports, recovery strategies, action plans and management plans that may become available during the duration of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	68
Category:	Birds – Project Infrastructure
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent potential injuries to birds.
Term or Condition:	The Proponent shall ensure flashing red, red strobe or white strobe lights and guy-wire deterrents are used on communications towers established for the Project. Consideration should also be given to reducing lighting when possible in areas where it may serve as an attractant to birds or other wildlife.

Reporting Requirements:	To be developed following approval of the Project by the Minister.
--------------------------------	--

***Commentary:** The first sentence in the above term and condition refers to the use of appropriate lighting to make communications and guy-wires visible to birds to ensure birds can avoid such obstacles, while the second sentence indicates that in other circumstances, where lighting of project areas could serve as an attractant to birds or other wildlife, consideration should be given to reducing such lighting.*

Term and Condition No.	69
Category:	Birds – Construction/Clearing Activities
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent nesting by birds in active Project areas.
Term or Condition:	Prior to bird migrations and commencement of nesting, the Proponent shall identify and install nesting deterrents (e.g. flagging) to discourage birds from nesting in areas likely to be disturbed by construction/clearing activities taking place during the nesting season.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	70
Category:	Birds – Construction/Clearing Activities
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to birds and nesting areas.
Term or Condition:	The Proponent shall protect any nests found (or indicated nests) with a buffer zone determined by the setback distances outlined in its Terrestrial Environment Mitigation and Monitoring Plan, until the young have fledged. If it is determined that observance of these setbacks is not feasible, the Proponent will develop nest-specific guidelines and procedures to ensure bird's nests and their young are protected.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	71
Category:	Birds – Flight Altitude Requirements
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate aircraft disturbance to birds.
Term or Condition:	Subject to safety requirements, the Proponent shall require all project related aircraft to maintain a cruising altitude of at least: <ul style="list-style-type: none"> a. 650 m during point to point travel when in areas likely to have migratory birds b. 1100 m vertical and 1500 m horizontal distance from observed

	<p>concentrations of migratory birds</p> <p>c. 1100 m over the area identified as a key site for moulting snow geese during the moulting period (July-August), and if maintaining this altitude is not possible, maintain a lateral distance of at least at least 1500 m from the boundary of this site.</p>
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As noted under the Commentary in Term and Condition #59 the Terrestrial Environment Working Group may provide the Proponent with additional direction regarding minimum flight altitude requirements that may differ from these requirements, but unless the Terrestrial Environment Working Group provides additional direction, the minimum flight altitudes set out above will govern with respect to migratory birds specifically.

Term and Condition No.	72
Category:	Birds – Flight Altitude Requirements
Responsible Parties:	The Proponent, Transport Canada
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate aircraft disturbance to birds.
Term or Condition:	The Proponent shall ensure that pilots are informed of minimum cruising altitude guidelines and that a daily log or record of flight paths and cruising altitudes of aircraft within all Project Areas is maintained and made available for regulatory authorities such as Transport Canada to monitor adherence and to follow up on complaints.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	73
Category:	Birds – Monitoring
Responsible Parties:	The Proponent, Qikiqtani Inuit Organization, TEWG, MEWG
Project Phase:	Construction, Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To develop appropriate mitigation and monitoring of impacts to birds.
Term or Condition:	The Proponent shall develop detailed and robust mitigation and monitoring plans for migratory birds, reflecting input from relevant agencies, the Qikiqtani Inuit Organization and communities as part of the Terrestrial Environment Working Group and to the extent applicable the Marine Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	74
Category:	Birds – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring

Objective:	To develop appropriate mitigation and monitoring of impacts to birds.
Term or Condition:	The Proponent shall continue to develop and update relevant monitoring and management plans for migratory birds under the Proponent's Environmental Management System, Terrestrial Environment Mitigation and Monitoring Plan prior to construction. The key indicators for follow up monitoring under this plan will include: peregrine falcon, gyrfalcon, common and king eider, red knot, seabird migration and wintering, and songbird and shorebird diversity.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	75
Category:	Birds – Monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assess the extent of terrestrial habitat loss.
Term or Condition:	The Proponent's monitoring program shall assess and report, on annual basis, the extent of terrestrial habitat loss due to the Project to verify impact predictions and provide updated estimates of the total project footprint.
Reporting Requirements:	To be provided within the Annual Report to the NIRB.

Marine Environment, Marine Water/Ice and Sediment Quality

Term and Condition No.	76
Category:	Marine Environment – General
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To mitigate potential impacts to the marine environment.
Term or Condition:	The Proponent shall develop a comprehensive Environmental Effects Monitoring Program to address concerns and identify potential impacts of the Project on the marine environment.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	77
Category:	Marine Environment – Working Group
Responsible Parties:	The Proponent, Environment Canada, Fisheries and Oceans Canada, the Government of Nunavut, the Qikiqtani Inuit Association and interested parties.
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	The MEWG will consult with, and provide advice and recommendations to the Proponent in connection with mitigation measures for the protection of

	the marine environment, monitoring of effects on the marine environment and the consideration of adaptive management plans. The role of the MEWG is not intended to either duplicate or to affect the exercise of regulatory authority by appropriate government agencies and departments.
Term or Condition:	A Marine Environment Working Group ("MEWG") shall be established to serve as an advisory group in connection with mitigation measures for the protection of the marine environment, and in connection with the Project Environmental Effects Monitoring program, as it pertains to the marine environment. Membership on the MEWG will include the Proponent, Environment Canada, Fisheries and Oceans Canada, the Government of Nunavut, the Qikiqtani Inuit Association and other agencies or interested parties as determined to be appropriate by these key members. Makivik Corporation shall also be entitled to membership on the MEWG at its election. The MEWG members may consider the draft terms of reference for the MEWG filed in the Final Hearing, but they are not bound by them.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	78
Category:	Marine Environment – Ice Breaking and Shipping
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To obtain accurate and current ice information.
Term or Condition:	The Proponent shall update the baseline information for landfast ice using a long-term dataset (28 years), and with information on inter-annual variation. The analysis for pack and landfast ice shall be updated annually using annual sea ice data (floe size, cover, concentration) and synthesized and reported in the most appropriate management plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: The annual update for pack and landfast ice includes not only identification of naturally-occurring effects, but also must include information on effects on floe size, cover and concentration of pack and landfast ice that may be attributed to icebreaking activities.

Term and Condition No.	79
Category:	Marine Environment – Ice Breaking and Shipping
Responsible Parties:	The Proponent, Canadian Hydrographic Services
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assist in the development of nautical charts for Canadian waters.
Term or Condition:	The Proponent shall provide the Canadian Hydrographic Services with bathymetric data and other relevant information collected in support of Project shipping where possible, to assist in the development of nautical charts for Canadian waters.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	80
Category:	Marine Environment – Ice Breaking and Shipping
Responsible Parties:	The Proponent, Canadian Hydrographic Services
Project Phase:	Construction
Objective:	To identify areas of risk along the shipping route.
Term or Condition:	Prior to commercial shipping of iron ore, the Proponent shall conduct a detailed risk assessment for Project-related shipping accidents, noting areas along the ship tracks where vessels may be particularly vulnerable to environmental conditions such as sea ice, and any seasonal differences in risk. This assessment shall inform mitigation and adaptive management plans.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	81
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To mitigate potential shoreline effects from shipping.
Term or Condition:	The Proponent shall reassess the potential for ship wake impacts to cause coastal change following any further changes to the proposed shipping routes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	82
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To mitigate potential shoreline effects from shipping.
Term or Condition:	The Proponent is strongly encouraged to have its ore carriers subjected to sea trials to measure wake characteristics at various vessel speeds and distances from the vessel.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	83
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To monitor relative sea level and storm surges.
Term or Condition:	The Proponent shall install tidal gauges at the Steensby Inlet Port site to monitor relative sea level and storm surges.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	84

Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent sediment redistribution along the shipping route.
Term or Condition:	The Proponent shall update its sediment redistribution modeling once ship design has been completed and sampling should be undertaken to validate the model and to inform sampling sites and the monitoring plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	85
Category:	Marine Environment – Shoreline Effects and Sediment Redistribution
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent sediment redistribution along the shipping route.
Term or Condition:	The Proponent shall develop a monitoring plan to verify its impact predictions associated with sediment redistribution resulting from propeller wash in shallow water locations along the shipping route. If monitoring detects negative impacts from sediment redistribution, additional mitigation measures will need to be developed and implemented.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	86
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To update ballast water discharge impact predictions.
Term or Condition:	Prior to commercial shipping of iron ore, the Proponent shall use more detailed bathymetry collected from Steensby Inlet to model the anticipated ballast water discharges from ore carriers. The results from this modeling shall be used to update ballast water discharge impact predictions and should account for density dependent flow and annual timescales over the project life. Additional sampling should also be undertaken to validate the model and to inform sampling sites and the monitoring plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	87
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent invasive species introductions resulting from Project shipping.
Term or Condition:	The Proponent shall develop a detailed monitoring program at a number of sites over the long term to evaluate changes to marine habitat and organisms and to monitor for non-native introductions resulting from Project-related shipping. This program needs to be able to detect changes

	that may have biological consequences and should be initiated several years prior to any ballast water discharge into Steensby Inlet to collect sufficient baseline data and should continue over the life of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	88
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent invasive species introductions resulting from Project shipping.
Term or Condition:	<p>Prior to commercial shipping of iron ore and in conjunction with the Marine Environment Working Group, the Proponent shall complete a risk analysis regarding ballast water discharge to assess the adequacy of treatment and implications on the receiving environment. This risk analysis shall consider, but not be limited to:</p> <ul style="list-style-type: none"> a. Invasive species; b. Seasonal oceanography; c. Ballast water quality and quantity; d. Receiving water quality; and e. Residual physical, chemical, and/or biological effects.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	89
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine water quality resulting from ballast water exchange.
Term or Condition:	The Proponent shall develop and implement an effective ballast water management program that may include the treatment and monitoring of ballast water discharges in a manner consistent with applicable regulations and/or that may exceed the regulations if the regulations are determined to be ineffective for providing the desired and predicted results.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	90
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to marine water quality resulting from ballast water exchange.
Term or Condition:	The Proponent shall incorporate into its Shipping and Marine Mammals Management Plan provisions to achieve compliance with the requirements under the International Convention for the Control and Management of

	Ship's Ballast Water and Sediment (2004).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	91
Category:	Marine Environment – Ballast Water
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to marine water quality in Steensby Inlet.
Term or Condition:	The Proponent shall develop a detailed monitoring plan for fouling that includes sampling areas on ships where antifouling treatment is not applied such as the areas where non-native species are most likely to occur.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	92
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure adequate spill response capacity.
Term or Condition:	The Proponent shall ensure that it maintains the necessary equipment and trained personnel to respond to all sizes of potential spills associated with the Project in a self sufficient manner.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	93
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment at Steensby Inlet.
Term or Condition:	Prior to construction, based on vessel selection and if so required, the Proponent shall reassess the risk analysis of using vessel-based fuel storage, including the potential environmental impacts of containment failure under a range of winter ice conditions, how a spill might spread and the impact of fuel if it does not volatilize to the atmosphere.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	94
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To promote public awareness of Project activities.
Term or Condition:	The Proponent shall consult directly with affected communities regarding its plans for over-wintering of fuel in Steensby Inlet, with discussion topics to

	include descriptions of the duration of proposed activities, vessel type, spill preparedness and emergency response protocols, environmental impact predictions and answers to community member questions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	95
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent, Transport Canada
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment at Steensby Inlet.
Term or Condition:	The Proponent shall meet or exceed all regulatory regulations and requirements as apply to the practice of overwintering a fuel vessel at Steensby Inlet, with reporting to the NIRB and Transport Canada.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	96
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To ensure adequate oversight of Project activities is occurring.
Term or Condition:	The Proponent will update the NIRB on the results of all compliance monitoring and site inspections undertaken by government agencies for the overwintering of a fuel vessel in Steensby Inlet.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	97
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment along the shipping route.
Term or Condition:	<p>Prior to the commercial shipping of iron ore, the Proponent shall conduct fuel spill dispersion modeling that will, at a minimum, consider:</p> <ul style="list-style-type: none"> a. Modeling of oil spills in the following areas: <ul style="list-style-type: none"> i. Pinch points, including: the mouth of Hudson Strait, the Resolution Island Area, the West End of Hudson Strait and Nottingham Island Area; ii. The approach into Steensby Inlet; iii. Shallow water and shorelines; and, iv. Areas that have been identified as having high flows and/or high concentrations of marine mammals, marine fish or seabirds. b. Open water and ice-covered conditions; c. Spill volumes up to and including loss of a full tanker cargo; and d. Differences in the quantity and properties of each type of bulk fuel transported by vessels when they are at, or in transit to, the port at

	Steensby Inlet.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	98
Category:	Marine Environment – Spill Prevention
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to the marine environment along the shipping route.
Term or Condition:	The Proponent shall incorporate the results of revised fuel spill dispersion modeling into its impact predictions for the marine environment and its spill response and emergency preparedness plans.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Marine Wildlife and Marine Habitat

Term and Condition No.	99
Category:	Marine Environment – Supplemental Baseline Assessments
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction
Objective:	To supplement baseline information and improve predictions for potential impacts to marine wildlife.
Term or Condition:	<p>The Proponent, working with the Marine Environment Working Group, shall consider and identify priorities for conducting the following supplemental baseline assessments:</p> <ol style="list-style-type: none"> Establish an all-season, inter-annual baseline in Steensby Inlet that enables effective monitoring of physical and chemical effects of ballast water releases, sewage outfall, and bottom scour by ship props, particularly downslope and downstream from the docks. This shall include the selection and identification of physical, chemical, and biological community/indicator components. The biological indicators shall include both pelagic and benthic species but with emphasis on relatively sedentary benthic species (e.g. sculpins). The collection of additional baseline data in Steensby Inlet on walrus, beluga, bearded seal and anadromous Arctic Char abundance, distribution ecology and habitat use. Enhance baseline data on marine wildlife (fish, invertebrates, birds, mammals, etc.) and to provide more details on species abundance and distribution found in the Project area. This shall include, but not be limited to the following: <ol style="list-style-type: none"> Aerial surveys for basking ringed seals throughout the landfast ice of Steensby Inlet and at appropriate control location; and Shore-based observations of pre-Project narwhal behavior in Milne Inlet. Enhance the baseline for affected marine systems, which includes control sites to detect Project-related changes before they cause

	significant harm.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	100
Category:	Marine Environment – Supplemental Baseline Assessments
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction
Objective:	To supplement baseline information and improve predictions for potential impacts to marine wildlife.
Term or Condition:	The Proponent shall update its Shipping and Marine Wildlife Management Plan, to include avoidance of polynyas and mitigation measures designed for potential fuel spills along the shipping lane during the winter months, with consideration for the impact of spilled fuel on marine mammals when they might be less mobile or able to avoid contact with spilt fuel or fumes.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	101
Category:	Marine Environment – Monitoring
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To monitor for potential impacts to marine wildlife and marine habitat.
Term or Condition:	<p>The Proponent shall incorporate into the appropriate monitoring plans the following items:</p> <ol style="list-style-type: none"> a. A monitoring program that focuses on walrus use of Steensby Inlet and their reaction to disturbance from construction activities, aircraft, and vessels; b. Efforts to involve Inuit in monitoring studies at all levels; c. Monitoring protocols that are responsive to Inuit concerns; d. Marine monitoring protocols are to consider the use of additional detecting devices to ensure adequate monitoring through changing seasonal conditions and daylight; e. Schedule for periodic aerial surveys as recommended by the Marine Environment Working Group; f. Periodic aerial surveys for basking ringed seals throughout the landfast ice of Steensby Inlet, and a suitable control location. Surveys shall be conducted at an appropriate frequency to detect change inter-annual variability; g. Shore-based observations of pre-Project narwhal behavior in Milne Inlet; h. Conduct landfast ice monitoring for the duration of the Project Operations phase, which will include: <ol style="list-style-type: none"> i. The number of ship transits that are able to use the same track; and, ii. The area of landfast ice disrupted annually by ship traffic; and i. Monitoring strategy focused on assessing and mitigating interaction

	between humans and wildlife at the port site(s).
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	102
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To promote public awareness of Project shipping activities for the general public.
Term or Condition:	The Proponent shall ensure that routing of project vessels is tracked and recorded, with data made accessible in real time to communities in Nunavut and Nunavik. A summary of all ship tracks shall be submitted annually to the NIRB.
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	103
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor effectiveness of mitigation of shipping impacts to marine wildlife.
Term or Condition:	<p>The Proponent shall report annually to the NIRB regarding project-related ship track and sea ice information, including:</p> <ul style="list-style-type: none"> a. A record of all ship tracks taken along both shipping routes covering the entire shipping season; b. An overlay of ship tracks onto ice imagery to determine whether ships are effectively avoiding shore leads and polynyas; c. A comparison of recorded ship tracks to the expected nominal shipping route, and probable extent of year-round shipping during periods of ice cover and open-water; d. An assessment of the level of adherence to the nominal shipping route and the spatial extent of the shipping zone of influence; and e. Marine bird and mammal species and number of individuals attracted to ship tracks in ice.
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	104
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine wildlife from Project shipping activities.
Term or Condition:	Subject to safety considerations and the potential for conditions as determined by the crew of transiting vessels, to result in route deviations, the Proponent shall require project vessels to maintain a route to the south

	of Mill Island to prevent disturbance to walrus and walrus habitat on the northern shore of Mill Island. Where project vessels are required to transit to the north of Mill Island owing to environmental or other conditions, an incident report is to be provided to the Marine Environment Working Group and the NIRB within 30 days, noting all wildlife sightings and interactions as recorded by shipboard monitors. The Proponent shall summarize all incidences of deviations from the nominal shipping route as presented in the FEIS to the NIRB annually, with corresponding discussion regarding justification for deviations and any observed environmental impacts.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	105
Category:	Marine Environment – Traffic Log and Shipping Information
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine wildlife from Project shipping activities.
Term or Condition:	<p>The Proponent shall ensure that measures to reduce the potential for interaction with marine mammals, particularly in Hudson Strait, are identified and implemented prior to commencement of shipping operations. These measures could include, but are not limited to:</p> <ul style="list-style-type: none"> a. Changes in the frequency and timing (including periodic suspensions) of shipping during winter months, i.e., when interactions with marine mammals are likely to be the most problematic; b. Reduced shipping speeds where ship-marine mammal interactions are most likely; and c. Identification of alternate shipping routes through Hudson Strait for use when conflicts between the proposed routes and marine mammals could arise. Repeated winter aerial survey results showing marine mammal distribution and densities in Hudson Strait would greatly assist in this task.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: Unless otherwise stated, the term “marine mammals” as used throughout the Project Certificate includes polar bears.

Term and Condition No.	106
Category:	Marine Environment – Shipboard Observers
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure that interactions with marine mammals and Project shipping activities are effectively monitored.
Term or Condition:	The Proponent shall ensure that shipboard observers are employed through all seasons and provided with the means to effectively carry out assigned duties. The role of shipboard observers in shipping operations should be

	taken into consideration during the design of ore carriers, with climate controlled stations and shipboard lighting incorporated to permit visual sightings by shipboard observers during all seasons and conditions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	107
Category:	Marine Environment – Shipboard Observers
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To ensure that interactions with marine mammals and Project shipping activities are effectively monitored.
Term or Condition:	The Proponent shall revise the proposed “surveillance monitoring” to improve the likelihood of detecting strong marine mammal responses occurring too far ahead of the ship to be detectable by observers aboard the ore carriers. A baseline study early in the shipping operations could employ additional surveillance to detect potential changes in distribution patterns and behavior. At an ambitious scope, this might be achieved using unmanned aircraft flown well ahead of ships, or over haul-out sites in the case of walruses.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	108
Category:	Marine Environment – Shipboard Observers
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To ensure that interactions with marine mammals and Project shipping activities are effectively monitored.
Term or Condition:	The Proponent shall ensure that data produced by the surveillance monitoring program is analysed rigorously by experienced analysts (in addition to being discussed as proposed in the FEIS) to maximize their effectiveness in providing baseline information, and for detecting potential effects of the Project on marine mammals in the Regional Study Area. It is expected that data from the long-term monitoring program be treated with the same rigor.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	109
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	The Proponent shall conduct a monitoring program to confirm the predictions in the FEIS with respect to disturbance effects from ships noise on the distribution and occurrence of marine mammals. The survey shall be designed to address effects during all seasons of the year, and include

	locations in Hudson Strait and Foxe Basin. The survey shall continue over a sufficiently lengthy period to determine the extent to which acclimation occurs for narwhal, beluga, bowhead and walrus.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	110
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	The Proponent shall develop a monitoring protocol that includes, but is not limited to, acoustical monitoring, to facilitate assessment of the potential short term, long term, and cumulative effects of vessel noise on marine mammals and marine mammal populations. The Proponent is expected to work with the Marine Environment Working Group to determine appropriate early warning indicator(s) that will ensure rapid identification of negative impacts.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	111
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	<p>The Proponent shall develop clear thresholds for determining if negative impacts as a result of vessel noise are occurring. Mitigation and adaptive management practices shall be developed to restrict negative impacts as a result of vessel noise. This shall include, but not be limited to:</p> <ul style="list-style-type: none"> a. Identifications of zones where cumulative noise could be mitigated due to biophysical features (e.g., water depth, distance from migration routes, distance from overwintering areas etc.); and b. Vessel transit planning, for all seasons, to determine the degree to which cumulative sound impacts can be mitigated through the seasonal use of different zones.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	112
Category:	Marine Environment – Ship Noise
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine mammals from Project shipping activities.
Term or Condition:	Prior to commercial shipping of iron ore, the Proponent, in conjunction with the Marine Environment Working Group, shall develop a monitoring protocol that includes, but is not limited to, acoustical monitoring that provides an assessment of the negative effects (short and long term

	<p>cumulative) of vessel noise on marine mammals. Monitoring protocols will need to carefully consider the early warning indicator(s) that will be best examined to ensure rapid identification of negative impacts. Thresholds shall be developed to determine if negative impacts as a result of vessel noise are occurring. Mitigation and adaptive management practices shall be developed to restrict negative impacts as a result of vessel noise. This shall include, but not be limited to:</p> <ol style="list-style-type: none"> Identification of zones where noise could be mitigated due to biophysical features (e.g., water depth, distance from migration routes, distance from overwintering areas etc.); Vessel transit planning, for all seasons. A monitoring and mitigation plan is to be developed, and approved by Fisheries and Oceans Canada prior to the commencement of blasting in marine areas.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	113
Category:	Marine Environment – Arctic Char
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine fish in Steensby Inlet.
Term or Condition:	The Proponent shall conduct monitoring of marine fish and fish habitat, which includes but is not limited to, monitoring for Arctic Char stock size and health condition in Steensby Inlet, as recommended by the Marine Environment Working Group.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	114
Category:	Marine Environment – Arctic Char
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine fish in Steensby Inlet.
Term or Condition:	In the event of the development of a commercial fishery in the Steensby Inlet area, the Proponent, in conjunction with the Marine Environment Working Group, shall update its monitoring program for marine fish and fish habitat to ensure that the ability to identify Arctic Char stock(s) potentially affected by Project activities and monitor for changes in stock size and structure of affected stocks and fish health (condition, taste) is maintained.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	115
Category:	Marine Environment – Arctic Char
Responsible Parties:	The Proponent

Project Phase:	Construction and Operations
Objective:	To prevent impacts to marine fish in Steensby Inlet.
Term or Condition:	The Proponent is encouraged to continue to explore off-setting options in both the freshwater and marine environment to offset the Harmful Alteration, Disruption or Destruction of Fish and Fish Habitat (HADD).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	116
Category:	Marine Environment – Blasting
Responsible Parties:	The Proponent, Fisheries and Oceans Canada
Project Phase:	Construction
Objective:	To prevent impacts to marine fish and fish habitat from explosives.
Term or Condition:	Prior to construction, the Proponent shall develop additional mitigation measures to minimize the effects of blasting on marine fish and fish habitat, marine water quality and wildlife that includes, but is not limited to compliance with the Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (Wright and Hopky, 1998) as modified by Fisheries and Oceans Canada for use in the North.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	117
Category:	Marine Environment – Blasting
Responsible Parties:	The Proponent, Fisheries and Oceans Canada
Project Phase:	Construction
Objective:	To prevent impacts to marine fish and fish habitat from explosives.
Term or Condition:	The Proponent shall ensure that blasting in, and near, marine water shall only occur during periods of open water. Blasting in, and near, fish-bearing freshwaters shall, to the greatest degree possible, only occur in open water. If blasting is required during ice-covered periods, it must meet requirements established by Fisheries and Oceans Canada.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	118
Category:	Marine Environment – Blasting
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To prevent impacts to marine fish and fish habitat from explosives.
Term or Condition:	The Proponent shall incorporate into the appropriate mitigation plan prior to construction, thresholds for the use of specific mitigation measures meant to prevent or limit marine wildlife disturbance, such as bubble curtains for blasting, and nitrate removal.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	119
Category:	Marine Environment – Ringed Seals
Responsible Parties:	The Proponent, Marine Environment Working Group
Project Phase:	Construction
Objective:	To prevent impacts to ringed seals from icebreaking associated with Project shipping.
Term or Condition:	The Proponent shall, in conjunction with the Marine Environment Working Group, monitor ringed seal birth lair abundance and distribution for at least two years prior to the start of icebreaking to develop a baseline, with continued monitoring over the life of the project as necessary to test the accuracy of the impact predictions and determine if mitigation is needed. Monitoring shall also include a control site outside of the Project's zone of influence.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	120
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals associated with Project shipping.
Term or Condition:	The Proponent shall ensure that, subject to vessel and human safety considerations, all project shipping adhere to the following mitigation procedures while in the vicinity of marine mammals: <ul style="list-style-type: none"> a. Wildlife will be given right of way; b. Ships will when possible, maintain a straight course and constant speed, avoiding erratic behavior; and c. When marine mammals appear to be trapped or disturbed by vessel movements, the vessel will implement appropriate measures to mitigate disturbance, including stoppage of movement until wildlife have moved away from the immediate area.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Commentary: As noted previously, unless otherwise stated, the term “marine mammals” as used throughout the Project Certificate includes polar bears.

Term and Condition No.	121
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent, Fisheries and Oceans Canada, Environment Canada
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and seabird colonies associated with Project shipping.
Term or Condition:	The Proponent shall immediately report any accidental contact by project vessels with marine mammals or seabird colonies to Fisheries and Oceans

	<p>Canada and Environment Canada respectively, by notifying the appropriate regional office of the:</p> <ul style="list-style-type: none"> a. Date, time and location of the incident; b. Species of marine mammal or seabird involved; c. Circumstances of the incident; d. Weather and sea conditions at the time; e. Observed state of the marine mammal or sea bird colony after the incident; and, f. Direction of travel of the marine mammal after the incident, to the extent that it can be determined.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	122
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and seabird colonies associated with Project shipping.
Term or Condition:	The Proponent shall summarize and report annually to the NIRB regarding accidental contact by project vessels with marine mammals or seabird colonies through the applicable monitoring report.
Reporting Requirements:	To be provided in the Annual Report to the NIRB.

Term and Condition No.	123
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and seabird colonies associated with Project shipping.
Term or Condition:	The Proponent shall provide sufficient marine mammal observer coverage on project vessels to ensure that collisions with marine mammals and seabird colonies are observed and reported through the life of the Project. The marine wildlife observer protocol shall include, but not be limited to, protocols for marine mammals, seabirds, and environmental conditions and immediate reporting of significant observations to the ship masters of other vessels along the shipping route, as part of the adaptive management program to address any items that require immediate action.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	124
Category:	Marine Environment – Marine Mammal Interactions
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance,

	Closure and Post-Closure Monitoring
Objective:	To prevent impacts to marine mammals and marine fish populations from increased harvesting pressures in Project areas.
Term or Condition:	The Proponent shall prohibit project employees from recreational boating, fishing, and harvesting of marine wildlife in project areas, including Steensby Inlet and Milne Inlet. The Proponent is not directed to interfere with harvesting by the public in or near project areas, however, enforcement of a general prohibition on harvesting in project areas by project employees during periods of active employment (i.e. while on site and between work shifts) is required.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	125
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assess acceptability of acoustic deterrent devices for the general public.
Term or Condition:	Prior to use of acoustic deterrent devices, the Proponent shall carry out consultations with communities along the shipping route to assess the acceptability of these devices. Feedback received from community consultations shall be incorporated into the appropriate mitigation plan.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	126
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To incorporate local input into monitoring data collection.
Term or Condition:	The Proponent shall design monitoring programs to ensure that local users of the marine area in communities along the shipping route have opportunity to be engaged throughout the life of the Project in assisting with monitoring and evaluating potential project-induced impacts and changes in marine mammal distributions.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	127
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To promote public awareness and engagement with Project shipping activities.
Term or Condition:	The Proponent shall ensure that communities and groups in Nunavik are

	kept informed of project shipping activities and are provided with opportunity to participate in the continued development and refinement of shipping related monitoring and mitigation plans.
Reporting Requirements:	To be developed following approval of the Project by the Minister.

Term and Condition No.	128
Category:	Marine Environment – Public Engagement
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure habitat compensation is acceptable to local communities.
Term or Condition:	The Proponent shall consult with local communities as fish habitat off-setting options are being considered and demonstrate its incorporation of input received into the design of the Fish Habitat Off-Setting Plan required to offset the Harmful Alteration, Disruption or Destruction of Fish and Fish Habitat (HADD).
Reporting Requirements:	To be developed following approval of the Project by the Minister.

4.3 Socio-Economic Terms and Conditions

Population Demographics

Term and Condition No.	129
Category:	Population Demographics – Qikiqtaaluk Socio-Economic Monitoring Committee
Responsible Parties:	The Proponent, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Description of the general monitoring framework to be developed in consultation with the Qikiqtaaluk Socio-Economic Monitoring Committee.
Term or Condition:	The Proponent is strongly encouraged to engage in the work of the Qikiqtaaluk Socio-Economic Monitoring Committee along with other agencies and affected communities, and it should endeavour to identify areas of mutual interest and priorities for inclusion into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities, and the North Baffin region as a whole.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	130
Category:	Population Demographics – Project-specific monitoring
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Recognizing that some Project-specific socio-economic monitoring

	initiatives may be best addressed in smaller more focused working groups, this is encouraged where possible.
Term or Condition:	The Proponent should consider establishing and coordinating with smaller socio-economic working groups to meet Project specific monitoring requirements throughout the life of the Project.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	131
Category:	Population Demographics – Monitoring demographic changes
Responsible Parties:	The Proponent, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor demographic changes affecting the North Baffin communities and the territory as a whole in order to understand changes and to evaluate the Proponent's predictions as related to population demographics.
Term or Condition:	The Qikiqtaaluk Socio-Economic Monitoring Committee is encouraged to engage in the monitoring of demographic changes including the movement of people into and out of the North Baffin communities and the territory as a whole. This information may be used in conjunction with monitoring data obtained by the Proponent from recent hires and/or out-going employees in order to assess the potential effect the Project has on migration.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	132
Category:	Population Demographics – Training programs
Responsible Parties:	The Proponent, North Baffin Hamlets, Municipal Training Organization, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To develop training programs in ways which contribute to limiting the potential for migration to occur as North Baffin residents seek training and employment opportunities in the larger centre of Iqaluit.
Term or Condition:	The Proponent is encouraged to partner with other agencies such as Hamlet organizations in the North Baffin region, the Municipal Training Organization, and the Government of Nunavut in order to adapt pre-existing, or to develop new programs which encourage Inuit to continue living in their home communities while seeking ongoing and progressive training and development. Programs may include driver training programs offered within Hamlets, providing upgraded equipment to communities for use in municipal works, providing incentives for small businesses to remain operating out of their community of origin, or supplementing existing recreational facilities and programming in North Baffin communities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	133
Category:	Population Demographics – Monitoring demographic changes
Responsible Parties:	The Proponent, members of QSEMC, Government of Nunavut, Nunavut Housing Corporation
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Training programs may be developed with the goal of limiting the potential for migration to occur as North Baffin residents may choose to seek employment and therefore move from smaller North Baffin communities to the larger centre of Iqaluit.
Term or Condition:	The Proponent is encouraged to work with the Qikiqtaaluk Socio-Economic Monitoring Committee and in collaboration with the Government of Nunavut's Department of Health and Social Services, the Nunavut Housing Corporation and other relevant stakeholders, design and implement a voluntary survey to be completed by its employees on an annual basis in order to identify changes of address, housing status (i.e. public/social, privately owned/rented, government, etc.), and migration intentions while respecting confidentiality of all persons involved. The survey should be designed in collaboration with the Government of Nunavut's Department of Health and Social Services, the Nunavut Housing Corporation and other relevant stakeholders. Non-confidential results of the survey are to be reported to the Government of Nunavut and the NIRB.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Commentary: Although the survey design and implementation should be undertaken in consultation with the Government of Nunavut, the responsibility for design and implementation of the survey remains with the Proponent.

Term and Condition No.	134
Category:	Population Demographics – Employee origin
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Project-specific information regarding employee origin is important to comparing predictions of labour availability and employment opportunities with actual levels of employment from various demographic segments over different geographic areas.
Term or Condition:	<p>The Proponent shall include with its annual reporting to the NIRB a summation of employee origin information as follows:</p> <ol style="list-style-type: none"> The number of Inuit and non-Inuit employees hired from each of the North Baffin communities, specifying the number from each; The number of Inuit and non-Inuit employees hired from each of the Kitikmeot and Kivalliq regions, specifying the number from each; The number of Inuit and non-Inuit employees hired from a southern location or other province/territory outside of Nunavut, specifying the locations and the number from each; and

	d. The number of non-Canadian foreign employees hired, specifying the locations and number from each foreign point of hire.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Education and Training

Term and Condition No.	135
Category:	Education and Training – Employee work/study programs
Responsible Parties:	The Proponent, Qikiqtani Inuit Association
Project Phase:	Construction and Operations
Objective:	Recognizing the 12-hour work days inherent with work at the Project site, it is not clear how employees would successfully engage in a work/study program offered by the Proponent.
Term or Condition:	The Proponent is encouraged to consider offering additional options for work/study programs available to Project employees (in addition to study programs at project sites that would be offered to employees when off shift).
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	136
Category:	Education and Training – Transferable skills and training
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Government of Nunavut, Municipal Training Organization
Project Phase:	Construction and Operations
Objective:	Offering training which results in certifications that are valid for employment at more than one site or in different fields provides an investment in the long-term employability of Nunavummiut.
Term or Condition:	The Proponent is encouraged to work with training organizations and/or government departments offering mine-related or other training in order to provide additional opportunities for employees to gain meaningful and transferable skills, credentials and certifications especially where such training of employees offered by the Proponent remains valid only at the Mary River Project sites.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	137
Category:	Education and Training – Transferable skills and training
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	Offering training which results in certifications that are valid for employment at more than one site or in different fields provides an investment in the long-term employability of Nunavummiut.
Term or Condition:	Prior to construction, the Proponent shall develop an easily referenced listing of formal certificates and licences that may be acquired via on-site training or training during employment at Mary River, such listing to

	indicate which of these certifications and licences would be transferable to a similar job site within Nunavut. This listing should be updated on an annual basis, and is to be provided to the NIRB upon completion and whenever it is revised.
Reporting Requirements:	The initial listing should be provided to the NIRB at least 60 days prior to the start of construction, an annually thereafter or as may otherwise be required.

Term and Condition No.	138
Category:	Education and Training – Inuit employee training
Responsible Parties:	The Proponent, Qikiqtani Inuit Association
Project Phase:	Construction
Objective:	Working together with the Qikiqtani Inuit Association to prepare effective training programs developed specifically for Inuit will assist in employee preparedness and may improve employee retention.
Term or Condition:	The Proponent is encouraged to work with the Qikiqtani Inuit Association to ensure the timely development of effective Inuit training and work-ready programs.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	139
Category:	Education and Training – Hiring southern Canadians and foreign employees
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	With the unknown availability of labour from the North Baffin region and Nunavut as a whole to provide employment to the Project, the need to employ southern Canadians or foreign workers may implicate the Proponent's on-site language, cross-cultural awareness, and other programming. Having information available regarding the sourcing of labour for the Project is important to ensuring the Proponent and others are prepared for any influx of southern or foreign employees.
Term or Condition:	Prior to commencing construction, the Proponent is requested to undertake and provide the results of a detailed labour market analysis which provides quantitative predictions of the number of employees that may reasonably need to be sourced from southern Canada and from foreign markets, identifying where applicable, the country of origin for the foreign labour.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	140
Category:	Education and Training – Survey of Nunavummiut employees
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	Monitoring the number of employees who leave previous employment in their home communities or who leave some type of formal education in pursuit of employment with the Project is important to evaluate predictions

	made and the potential impacts to North Baffin communities and education rates.
Term or Condition:	The Proponent is encouraged to survey Nunavummiut employees as they are hired and specifically note the level of education obtained and whether the incoming employee resigned from a previous job placement or educational institution in order to take up employment with the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	141
Category:	Education and Training – Training of Inuit
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To ensure that effective training is available in a timely manner.
Term or Condition:	The Proponent is encouraged to work with the Qikiqtani Inuit Association prior to construction in order to prioritize the provision of training of Inuit to serve as employees in monitoring or other such capacities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Livelihood and Employment

Term and Condition No.	142
Category:	Livelihood and Employment – Employee cohesion
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To promote cohesion between employees on site, and between employees and their families.
Term or Condition:	The Proponent is encouraged to address the potential direct and indirect effects that may result from Project employees' on-site use of various Inuktitut dialects as well as other spoken languages, specifically paying attention to the potential alienation of some employees that may occur as a result of language or other cultural barriers.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	143
Category:	Livelihood and Employment – Employee family contact
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To enable and foster connection and contact between employees and family members.
Term or Condition:	The Proponent is encouraged to consider the use of both existing and innovative technologies (e.g. community radio station call-in shows, cell phones, video-conferencing, Skype, etc.) as a way to ensure Project employees are able to keep in contact with family and friends and to ward off the potential for feelings of homesickness and distance to impact on employee retention and family stability.

Reporting Requirements:	To be developed following approval of the Project by the Minister
--------------------------------	---

Term and Condition No.	144
Category:	Livelihood and Employment – Requirements for employment
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To ensure that the prerequisites and requirements for employment are clear and well known in work readiness programs.
Term or Condition:	The Proponent is encouraged to make requirements for employment clear in its work-readiness and other public information programs and documentation, including but not limited to: education levels, criminal records checks, policies relating to drug and alcohol use and testing, and language abilities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	145
Category:	Livelihood and Employment – Barriers to employment for women
Responsible Parties:	The Proponent, Government of Nunavut, members of QSEMC
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor and understand the existence of barriers to employment for women specifically relating to childcare availability and costs.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut and the Qikiqtaaluk Socio-Economic Monitoring Committee to monitor the barriers to employment for women, specifically with respect to childcare availability and costs.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	146
Category:	Livelihood and Employment – Availability of childcare for Project employees
Responsible Parties:	Government of Nunavut and Qikitani Inuit Association
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To lessen the barriers to employment as relating to the availability of childcare.
Term or Condition:	The Government of Nunavut and the Qikiqtani Inuit Association are strongly encouraged to investigate the possibility for Project revenue streams to support initiatives or programs which offset or subsidize childcare for Project employees.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	147
Category:	Livelihood and Employment – Affordability of housing
Responsible Parties:	The Proponent, Government of Nunavut and Nunvut Housing Corporation

Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To lessen the barriers to maintaining employment as relating to the availability and costs of housing.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut and the Nunavut Housing Corporation to investigate options and incentives which might enable and provide incentive for employees living in social housing to maintain employment as well as to negotiate for and obtain manageable rental rates.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Economic Development and Self-Reliance, and Contracting and Business Opportunities

Term and Condition No.	148
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Food security
Responsible Parties:	The Proponent, Members of the QSEMC
Project Phase:	Construction and Operations
Objective:	To improve understanding of the interactions between the Project and Inuit harvesting and how this relates to food security for residents of the North Baffin.
Term or Condition:	The Proponent is encouraged to undertake collaborative monitoring in conjunction with the Qikiqtaaluk Socio-Economic Monitoring Committee's monitoring program which addresses Project harvesting interactions and food security and which includes broad indicators of dietary habits.
Reporting Requirements:	To be developed following approval of the Project by the Minister

***Commentary:** If available, the Proponent should also incorporate information regarding harvesting and food security indicators generated under the auspices of the Nunavut General Monitoring Plan.*

Term and Condition No.	149
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Impacts of temporary closure
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To further the understanding of how a temporary closure may impact on the well-being of the residents and businesses of the North Baffin region.
Term or Condition:	Prior to the commencement of operations, the Proponent is required to undertake an analysis of the risk of temporary mine closure, giving consideration to how communities in the North Baffin region may be affected by temporary and permanent closure of the mine, including economic, social and cultural effects.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	150
-------------------------------	------------

Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Impacts to visitors of Sirmilik National Park
Responsible Parties:	The Proponent, Parks Canada
Project Phase:	Construction and Operations
Objective:	To limit potential of Project impacts upon visitors, researchers and/or beneficiary users of the Sirmilik National Park.
Term or Condition:	<p>The Proponent will ensure the following:</p> <ul style="list-style-type: none"> a. The Proponent will maintain, where possible, a minimum flying altitude of 2,000 feet over the park, except for approaches to land, take-off or for safety reasons. b. The Proponent will ensure that certification of noise compliance is current, where compliance is applicable. c. The Proponent is encouraged to provide Parks Canada with regular flight and shipping schedules that can be used to brief Park visitors. d. The Proponent is strongly encouraged to provide due consideration to wilderness experience during its operations in the open water season, especially during the month of August which is typically a time of high use by sea kayakers.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	151
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – Access to housing
Responsible Parties:	The Proponent
Project Phase:	Construction and Operations
Objective:	To investigate ways that economic development and self-reliance may improve access to housing by employees.
Term or Condition:	The Proponent is encouraged to investigate measures and programs designed to assist Project employees with homeownership or access to affordable housing options.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	152
Category:	Economic Development and Self-Reliance, and Contracting and Business Opportunities – IIBA contract requirements
Responsible Parties:	The Proponent, Qikiqtani Inuit Association
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To improve ability of small businesses to access Project contract and sub-contract opportunities.
Term or Condition:	The Qikiqtani Inuit Association is encouraged to provide the Board and the Qikiqtaaluk Socio-Economic Monitoring Committee with information regarding the effectiveness of any provisions within the Inuit Impact and Benefit Agreement which may require that larger contracts be broken down into smaller size in order that they are reasonably managed by smaller businesses in the North Baffin region, while respecting any confidential or

	privileged information.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Human Health and Well-Being

Term and Condition No.	153
Category:	Human Health and Well-Being – Employee and family health and well-being
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To provide adequate medical services on site, including those that contribute to the mental health and well-being of all employees.
Term or Condition:	The Proponent is encouraged to employ a mental health professional to provide counselling to Inuit and non-Inuit employees in order to positively contribute toward employee health and well-being.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	154
Category:	Human Health and Well-being – Indirect impacts to health and well-being
Responsible Parties:	The Proponent, Government of Nunavut, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To understand the indirect impacts of the Project upon health and well-being.
Term or Condition:	The Proponent shall work with the Government of Nunavut and the Qikiqtaaluk Socio-Economic Monitoring Committee to monitor potential indirect effects of the Project, including indicators such as the prevalence of substance abuse, gambling issues, family violence, marital problems, rates of sexually transmitted infections and other communicable diseases, rates of teenage pregnancy, high school completion rates, and others as deemed appropriate.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	155
Category:	Human Health and Well-being – Employee cohesion
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To encourage the on-site cohesion of employees through cultural-awareness and social programs.
Term or Condition:	The Proponent is strongly encouraged to provide the NIRB with an updated report on its development of mitigation measures and plans to deal with potential cultural conflicts which may occur at site as these may become needed.
Reporting Requirements:	To be provided at least 60 days prior to the commencement of any construction activities.

Term and Condition No.	156
Category:	Human Health and Well-Being – Support initiatives
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To assist with fostering well-being within point-of-hire communities.
Term or Condition:	The Proponent is encouraged to assist with the provision and/or support of recreation programs and opportunities within the potentially affected communities in order to mitigate potential impacts of employees' absences from home and community life.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	157
Category:	Human Health and Well-Being – Counseling and treatment programs
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To make available, necessary treatment and counseling services for employee and family well-being.
Term or Condition:	The Proponent should consider providing counseling and access to treatment programs for substance and gambling addictions as well as which address domestic, parenting, and marital issues that affect employees and/or their families.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Community Infrastructure and Public Services

Term and Condition No.	158
Category:	Community Infrastructure and Public Services – Impacts to health services
Responsible Parties:	The Proponent, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor indirect Project impacts to health and social services provided by the Government of Nunavut.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut and other parties as deemed relevant in order to develop a Human Health Working Group which addresses and establishes monitoring functions relating to pressures upon existing services and costs to the health and social services provided by the Government of Nunavut as such may be impacted by Project-related in-migration of employees, to both the North Baffin region in general, and to the City of Iqaluit in particular.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	159
Category:	Community Infrastructure and Public Services – Impacts to infrastructure
Responsible Parties:	The Proponent, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To monitor Project-related impacts to infrastructure within the Local Study Area communities.
Term or Condition:	The Proponent is encouraged to work with the Government of Nunavut to develop an effects monitoring program that captures increased Project-related pressures to community infrastructure in the Local Study Area communities, and to airport infrastructure in all point-of-hire communities and in Iqaluit.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	160
Category:	Community Infrastructure and Public Services – Distribution of benefits
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Government of Nunavut
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure the distribution of benefits is done in a way that off-sets Project-related impacts to infrastructure or services.
Term or Condition:	The Government of Nunavut and the Qikiqtani Inuit Association are encouraged to cooperate to ensure in a broad sense, that Project benefits are distributed across impacted communities and across various demographic groups within these communities in a manner that best offsets any Project-related impacts to infrastructure or services.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	161
Category:	Community Infrastructure and Public Services – Policing
Responsible Parties:	The Proponent, Government of Nunavut, Royal Canadian Mounted Police
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure the territorial government and its policing service are adequately prepared to handle any Project-related increases to the need for service and associated impacts.
Term or Condition:	The Government of Nunavut should be prepared for any potential increased need for policing, and ensure that the Royal Canadian Mounted Police is prepared to handle ongoing Project-related demographic changes and subsequent crime prevention that may be needed as a result of the development, operation, and closure of the Project.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Culture, Resources and Land Use

Term and Condition No.	162
Category:	Culture, Resources and Land Use – Public consultation
Responsible Parties:	The Proponent, Elders and community members of the North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure the ongoing and consistent involvement of Elders and community members in developing and revising monitoring and mitigation plans.
Term or Condition:	The Proponent should make all reasonable efforts to engage Elders and community members of the North Baffin communities in order to have community level input into its monitoring programs and mitigative measures, to ensure that these programs and measures have been informed by traditional activities, cultural resources, and land use as such may be implicated or impacted by ongoing Project activities.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	163
Category:	Culture, Resources and Land Use – Public consultation
Responsible Parties:	The Proponent, North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To involve communities in the development and evolution of management and monitoring plans.
Term or Condition:	The Proponent shall continue to engage and consult with the communities of the North Baffin region in order to ensure that Nunavummiut are kept informed about the Project activities, and more importantly, in order that the Proponent's management and monitoring plans continue to evolve in an informed manner.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	164
Category:	Socio-Economic Impacts – Shipping notification
Responsible Parties:	The Proponent, Elders and community members of the North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	In order to inform members of North Baffin communities of planned Project shipping transits such that community members' planned travel routing may be adjusted to avoid interaction with Project ships and/or ship tracks.
Term or Condition:	The Proponent is required to provide notification to communities regarding scheduled ship transits throughout the regional study area, real-time data regarding ships in transit and any changes to the proposed shipping schedule.

Reporting Requirements:	The information required shall be provided on a monthly basis at a minimum or more often as the Proponent determines necessary and is to be provided to the Proponent's community liaison officers and those of the Qikiqtani Inuit Association as well as the Hunters and Trappers Organizations and Hamlet organizations of the North Baffin communities, Coral Harbour, and the NIRB's Monitoring Officer. Where deviations from the proposed schedule or routing are required, this information shall be provided as soon as possible.
--------------------------------	--

Term and Condition No.	165
Category:	Socio-Economic Impacts – Emergency shelters
Responsible Parties:	The Proponent, Elders and community members of the North Baffin communities
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	In order to provide for human safety precautions in the event of adverse weather or other emergency situations along segments of linear transportation infrastructure.
Term or Condition:	The Proponent is strongly encouraged to provide buildings along the rail line and Milne Inlet Tote Road for emergency shelter purposes, and shall make these available for all employees and any land users travelling through the Project area. In the event that these buildings cannot, for safety or other reasons be open to the public, the Proponent is encouraged to set up another form of emergency shelters (e.g. seacans outfitted for survival purposes) every 1 kilometre along the rail line and Milne Inlet Tote Road. These shelters must be placed along Tote Road and rail routing prior to operation of either piece of infrastructure, and must be maintained for the duration of project activities, including the closure phase.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	166
Category:	Socio-Economic Impacts – Public Consultation
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To ensure members of the public are able to access shipping information on an as-required basis in order to inform potential users of the scheduled Project activities which could require deviations to land users' schedules or routing.
Term or Condition:	The Proponent should ensure through its consultation efforts and public awareness campaigns that the public have access to shipping operations personnel for transits into and out of both Steensby Inlet port and Milne Inlet port either via telephone or internet contact, in order that any questions regarding ice conditions or ship movements that could assist ice users in preparing for travel may be answered by Project staff in a timely fashion.

Reporting Requirements:	To be developed following approval of the Project by the Minister
--------------------------------	---

Benefits, Royalty, and Taxation

Term and Condition No.	167
Category:	Benefits, Royalty and Taxation – Partnership Agreements
Responsible Parties:	The Proponent, Government of Nunavut
Project Phase:	Construction
Objective:	The Proponent and the Government of Nunavut develop a formalized partnership agreement.
Term or Condition:	The Proponent and the Government of Nunavut are strongly encouraged to, as soon as practical following the issuance of the Project Certificate, enter into discussions to negotiate a Development Partnership Agreement.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Governance and Leadership

Term and Condition No.	168
Category:	Governance and Leadership – Monitoring program
Responsible Parties:	The Proponent, members of the QSEMC
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	Outline variables that are relevant to the Project and which should be adopted by the QSEMC's monitoring program.
Term or Condition:	The specific socioeconomic variables as set out in Section 8 of the Board's Report, including data regarding population movement into and out of the North Baffin Communities and Nunavut as a whole, barriers to employment for women, project harvesting interactions and food security, and indirect Project effects such as substance abuse, gambling, rates of domestic violence, and education rates that are relevant to the Project, be included in the monitoring program adopted by the Qikiqtani Socio-Economic Monitoring Committee.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Commentary: As noted previously, if available, the Proponent should also incorporate information regarding the specific variables in Section 8 of the Board's Final Hearing Report that may be monitored under the auspices of the Nunavut General Monitoring Plan.

Term and Condition No.	169
Category:	Governance and Leadership – Monitoring economic effects
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Temporary Closure / Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To maintain transparency inform communities in relation to economic benefits associated with the Project.

Term or Condition:	The Proponent provide an annual monitoring summary to the NIRB on the monitoring data related to the regional and cumulative economic effects (positive and negative) associated with the Project and any proposed mitigation measures being considered necessary to mitigate the negative effects identified.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Other Terms and Conditions

Accidents and Malfunctions

Term and Condition No.	170
Category:	Accidents and Malfunctions – Terrestrial Wildlife Management and Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	Updates to plan in order to better understand the potential for, and to minimize possible caribou-railway interactions.
Term or Condition:	The Proponent shall include in an updated Terrestrial Wildlife Management and Monitoring Plan, plans for increased caribou monitoring efforts including weekly winter track surveying and summer and fall surveys undertaken on foot twice per month.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	171
Category:	Accidents and Malfunctions – Terrestrial Wildlife Management and Monitoring Plan
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	Updates to plan in order to minimize potential for caribou-railway interactions.
Term or Condition:	The Proponent shall include within its updated Terrestrial Wildlife Management and Monitoring Plan, a commitment to establish deterrents along the railway embankment at any areas where it is determined that caribou are utilizing the embankment to facilitate movement and where such movement presents a likelihood of caribou mortality to occur.
Reporting Requirements:	To be developed following approval of the Project by the Minister

Term and Condition No.	172
Category:	Accidents and Malfunctions – Overwintered fuel vessel
Responsible Parties:	The Proponent
Project Phase:	Construction
Objective:	To provide evidence that vessel to be used is fit and insured for proposed use.

Term or Condition:	The Proponent is encouraged to provide the Government of Nunavut with evidence that the vessel that it intends to use for the overwintering of fuel has been designed and certified for use under the conditions which it is expected to operate, and that it be required to provide copies of the vessel owners' insurance policies.
Reporting Requirements:	The required information is to be provided to the Government of Nunavut as soon as possible, and at a minimum, at least 60 days prior to the commencement of any construction related shipping.

Term and Condition No.	173
Category:	Accidents and Malfunctions – Use of containment booms
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To provide additional spill contingency measures for spills in marine areas.
Term or Condition:	The Proponent shall employ full containment booms during all ship-to-shore and other marine-based fuel transfer events.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	174
Category:	Accidents and Malfunctions – Community level spill response
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure
Objective:	To improve community ability to assist in spill response.
Term or Condition:	The Proponent and the Canadian Coast Guard are required to provide spill response equipment and annual training to Nunavut communities along the shipping route to potentially improve response times in the event of a spill.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	175
Category:	Accidents and Malfunctions – Ship track markers in ice cover
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Hunters and Trappers Organizations of the North Baffin region and Coral Harbour
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To ensure that measures taken to mark the shipping track(s) during periods of ice cover are effective in advising ice-based travelers, and that, where necessary, revisions to this practice can be made to ensure public safety.
Term or Condition:	The Proponent shall, in coordination and consultation with the Qikiqtani Inuit Association and the Hunters and Trappers Organizations of the North Baffin communities and Coral Harbour, provide updates to its Shipping and Marine Mammals Management Plan to include adaptive management measures it proposes to take should the placement of reflective markers along the ship track in winter months not prove to be a feasible method of marking the track to ensure the safety of ice-based travelers.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Term and Condition No.	176
Category:	Accidents and Malfunctions – Revised spill modeling
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To improve community ability to assist in spill response.
Term or Condition:	The Proponent is required to revise its spill planning to include additional trajectory modeling for areas of Hudson Strait, such as Mill Island, where walrus concentrate, as well as for mid-Hudson Strait during winter conditions.
Reporting Requirements:	The updated modeling shall be provided to the NIRB and to Fisheries and Oceans Canada for review at least 3 months prior shipment of bulk fuel to Steensby Inlet.

Term and Condition No.	177
Category:	Accidents and Malfunctions – Foreign flagged vessels
Responsible Parties:	The Proponent
Project Phase:	Construction, Operations, Closure and Post-Closure Monitoring
Objective:	To ensure foreign flagged ships operating in Canadian waters are held to the same standard as domestic ships with regard to emergency response planning.
Term or Condition:	The Proponent shall enroll any foreign flagged vessels commissioned for Project-related shipping within Canadian waters into the relevant foreign program equivalent to Transport Canada's Marine Safety Delegated Statutory Inspection Program.
Reporting Requirements:	To be determined following approval of the Project by the Minister

Alternatives Analysis

Term and Condition No.	178
Category:	Alternatives Analysis – Mill Island shipping route consideration
Responsible Parties:	The Proponent, Qikiqtani Inuit Association, Nunavut Impact Review Board, Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance
Objective:	To prevent disturbance to walrus and walrus habitat on the northern shore of Mill Island.
Term or Condition:	Subject to safety considerations and the potential for conditions, as determined by the crew of transiting vessels, to result in route deviations, the Proponent shall require project vessels to maintain a route to the south of Mill Island to prevent disturbance to walrus and walrus habitat on the northern shore of Mill Island.
Reporting Requirements:	Where project vessels are required to transit to the north of Mill Island owing to environmental or other conditions, an incident report is to be provided to the Marine Environment Working Group and the NIRB within 30 days, noting all wildlife sightings and interactions as recorded by shipboard monitors. The Proponent shall summarize all incidences of deviations from

	the nominal shipping route as presented in the FEIS to the NIRB annually, with corresponding discussion regarding justification for deviations and any observed environmental impacts.
--	--

Operational Variability

Term and Condition No.	179
Category:	Operational Variability
Responsible Parties:	The Proponent
Project Phase:	Operations
Objective:	To apply the precautionary principle in respect of potential effects on marine wildlife and marine habitat from changes to shipping frequency that may result from a significant increase in mine production for an extended period of time.
Term or Condition:	Baffinland shall not exceed 20 ore carrier transits to Steensby Port per month during the open water season and 242 transits per year in total.
Reporting Requirements:	To be developed following approval by the Minister

Transboundary Effects

Term and Condition No.	180
Category:	Transboundary Effects – Makivik Corporation involvement in the Marine Environment Working Group
Responsible Parties:	The Proponent, members of the Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enable Makivik Corporation and Nunavik communities near shipping lanes to remain informed and involved in those shipping activities which could affect the marine environment and marine mammals.
Term or Condition:	The Marine Environment Working Group established for this Project shall invite a representative from Makivik Corporation to be a member of the Group
Reporting Requirements:	To be developed following approval by the Minister

Term and Condition No.	181
Category:	Transboundary Effects – Marine Environment Working Group reporting
Responsible Parties:	The Proponent, members of Marine Environment Working Group
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enable Makivik Corporation and Nunavik communities near shipping lanes to remain informed and involved in those shipping activities which could affect the marine environment and marine mammals.
Term or Condition:	Regardless of whether Makivik Corporation participates as a member of the Marine Environment Working Group, the Marine Environment Working Group will provide Makivik Corporation with regular updates regarding the

	activities of the Marine Environment Working Group throughout the Project life cycle.
Reporting Requirements:	To be developed following approval by the Minister

Term and Condition No.	182
Category:	Transboundary Effects – Reporting to Marine Environment Working Group (MEWG)
Responsible Parties:	The Proponent, Makivik Corporation
Project Phase:	Construction, Operations, Temporary Closure /Care and Maintenance, Closure and Post-Closure Monitoring
Objective:	To enable Makivik Corporation and Nunavik communities near shipping lanes to remain informed and involved in those shipping activities which could affect the marine environment and marine mammals.
Term or Condition:	Baffinland shall make available to Makivik Corporation any ship route deviation reports provided to the NIRB in accordance with the terms and conditions set out in Section 4.12.4 of the Final Hearing Report.
Reporting Requirements:	To be developed following approval by the Minister

APPENDIX A – MONITORING PROGRAM

[To be developed]