TRANSPORT CANADA'S TECHNICAL REVIEW SUBMISSION TO THE NUNAVUT IMPACT REVIEW BOARD RESPECTING:

BAFFINLAND IRON MINES CORPORATION'S MARY RIVER PROJECT PHASE 2 PROPOSAL

NIRB File # 08MN053

March 7, 2019

EXECUTIVE SUMMARY

Transport Canada (the Department) has undertaken a review of the revised Final Environmental Impact Statement (FEIS) Addendum for the Baffinland Iron Mines Corporation's (the Proponent) Mary River Project Phase 2 proposal (the Project). Transport Canada is providing the Nunavut Impact Review Board (NIRB) with the Department's Technical Review Submission to address issues related to Transport Canada's regulatory regime and departmental mandate.

The Proponent is proposing the Project in the Qikiqtani region of Nunavut. The Project includes the expansion of the Milne Port to include a second ore dock, the construction of a 110-km railway between the mine site and Milne Port, and the construction, operation, closure and post-closure activities associated with the mine and its associated infrastructures.

Transport Canada is a Responsible Minister for the review of the Project because several project components and activities will be required to be in carried out in accordance with applicable legislation and regulations within the Department's mandate. This Technical Review Submission summarizes Transport Canada's mandate and provides specific recommendations with respect to the *Navigation Protection Act* (NPA), *Canada Shipping Act, 2001* (CSA 2001), *Arctic Waters Pollution Prevention Act* (AWPPA), *Marine Liability Act* (MLA), *Marine Transportation Security Act* (MTSA), the *Transportation of Dangerous Goods Act, 1992* (TDGA), the *Railway Safety Act* and the Railway Safety Act Regulatory Framework.

The comments and recommendations in this submission are designed to address issues related to the Transport Canada mandate and regulatory requirements and focus mainly on Rail and Marine Safety. If new information, relevant to Transport Canada's mandate, is presented during the Technical Meeting, the Department may amend the analysis and/or recommendations presented in this submission.

The Department looks forward to continued dialogue and engagement with all stakeholders, and the Board throughout the review process.

SOMMAIRE EXÉCUTIF

Transports Canada (le Ministère) a entrepris un examen de l'addenda de l'énoncé final des incidences environnementales révisé pour la proposition de la phase 2 du projet Mary River (le projet) de la société Baffinland Iron Mines Corporation (le promoteur). Transports Canada présente à la Commission du Nunavut chargée de l'examen des répercussions (CNER) la soumission de l'examen technique du Ministère pour traiter des questions liées à la réglementation applicable et au mandat ministériel de Transports Canada.

Le promoteur propose de réaliser le projet dans la région de Qikiqtani, au Nunavut. Le projet comprend l'agrandissement du port de Milne pour y inclure un deuxième quai minéralier, la construction d'un chemin de fer de 110 km reliant le site minier et le port de Milne, et des activités de construction, d'exploitation, de fermeture et de post-fermeture associées à la mine et à ses infrastructures connexes.

Transports Canada est un ministère responsable de l'examen du projet parce que plusieurs composantes et activités du projet devront être exécutées conformément aux lois et règlements applicables dans le cadre du mandat du Ministère. La présente soumission de l'examen technique résume le mandat de Transports Canada et contient des recommandations précises concernant la *Loi sur la protection de la navigation* (LPN), la *Loi de 2001 sur la marine marchande du Canada* (LMMC 2001), la *Loi sur la prévention de la pollution des eaux arctiques* (LPPEA), la *Loi sur la responsabilité en matière maritime* (LRM), la *Loi sur la sûreté du transport maritime* (LSTM), la *Loi de 1992 sur le transport des marchandises dangereuses* (LTMD), la *Loi sur la sécurité ferroviaire* et le cadre de réglementation de la *Loi sur la sécurité ferroviaire*.

Les commentaires et les recommandations contenus dans la présente soumission visent à aborder des questions liées au mandat et aux exigences réglementaires de Transports Canada et portent principalement sur la sécurité ferroviaire et maritime. Si de nouveaux renseignements touchant le mandat de Transports Canada sont présentés au cours de la réunion sur les aspects techniques, le Ministère peut modifier l'analyse ou les recommandations fournies dans la présente soumission.

Le Ministère se réjouit à la perspective de poursuivre le dialogue et le travail entamé avec l'ensemble des intervenants et avec la Commission tout au cours du processus d'examen.

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ᐊᐅᓛᕈᑎᓕᕆᔩᑦ ᑲᓇᑕᒥ (ᐃᖃᓇᐃᔭᕐᕕᖓᑦ) ᕿᒥᕐᕈᐊᖅᓯᒪᓕᖅᐳᑦ ᑭᒍᓪᓕᖅᐹᓂᒃ ᐊᕙᑎᓕᕆᓂᕐᒥᒃ ᖁᐅᔨᓴᕐᓂᕐᒥᒃ ᐃᓚᒋᐊᕈᑕᐅᔪᒪᔪᓂᒃ ᐹᕝᕕᓐᓛᓐᑯᑦ ᓴᕕᒃᓴᖅᓯᐅᖅᑏᑦ ᑯᐊᐳᓈᖅᓯᖏᓂᒃ (ᐱᕙᓪᓕᐊᑎᑦᑎᔪᒪᔪᑦ) ᓄᓘᔭᕐᒥᒃ ᑐᓪᓕᕆᔭᐅᓂᐊᖅᑐᓂᒃ ᐱᓕᕆᐊᕆᔪᒪᔭᖏᓐᓂᒃ ᑐᒃᓯᕋᐅᑎᒋᔭᖏᓐᓂ (ᐱᕙᓪᓕᐊᑎᑦᑐᒪᔭᖏᓐᓂ). ᐊᐅᓪᓛᕈᑎᓕᕆᔩᑦ ᑲᓇᑕᒥ ᑐᓂᓯᕗᑦ ᓄᓇᕗᒻᒥ ᐊᕙᑎᓕᕆᔩᑦ ᑲᑎᒪᔨᖏᓐᓄᑦ (ᐊᕙᑎᓕᕆᔩᒃᑯᑦ ᑖᒃᕙᓂ) ᐃᖃᓇᐃᔭᕐᕕᒥᒃ ᐱᓕᕆᐊᒃᓴᓇᔪᒪᔭᖏᓐᓂᒃ ᐅᓂᒃᑳᕈᑎᓂᒃ ᖃᓄᐃᓕᐅᕈᑕᐅᔪᓐᓇᕐᓂᖏᓐᓂᒃ ᐱᔪᓂᒃ ᐊᐅᓛᕈᑎᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ ᒪᓕᒐᕙᒃᑕᖏᓐᓂᒃ ᐊᒻᒪᓗ ᐃᖃᓇᐃᔭᕐᕕᒃᑎᓐᓂ ᑎᓕᔭᐅᓯᒪᓂᑦᑎᓐᓂᒃ.

ᐱᕙᓪᓕᐊᑎᑦᑎᔪᒪᔪᑦ ᑕᐃᒃᑯᐊ ᐱᒋᐊᖅᑎᑦᑎᔪᒪᖕᒪᑕ ᕿᑭᖅᑖᓗᑉ ᐊᕕᒃᑐᖅᓯᒪᓂᖓᓂ ᓄᓇᕗᒻᒥ. ᐱᓕᕆᐊᕆᔪᒪᔭᖏᑦ ᐃᓚᖃᕐᓂᐊᖅᑐᑦ ᒪᑯᓂᖓ, ᐊᖏᓪᓕᒋᐊᖅᑕᐅᓇᔭᕐᓂᖅ ᕿᖑᐊᓂ ᕿᓚᓇᖅᑐᕕᖕᒥ ᑐᓚᒃᑕᕐᕕᒃᓴᒥᒃ ᓄᑖᖑᓂᐊᓕᕐᒥᔪᒥᒃ, ᓴᓇᔭᐅᓂᖓᓂᒡᓗ 110-ᑭᓵᒥᑕᓕᖕᒥᒃ ᓄᓇᓯᐅᑎᑯᑖᖕᓄᑦ ᓴᕕᖕᓂᒃ ᐊᖁᑎᑯᑖᖕᒥᒃ ᐊᑯᓐᓂᖓᒍᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᖓᑕ ᐊᒻᒪᓗ ᕿᖑᐊᓂ ᑐᓚᒃᑕᕐᕕᐅᑉ, ᐊᐅᓚᑦᑎᓂᕆᔭᖏᓐᓂᒡᓗ, ᒪᑐᔭᐅᓕᖅᐸᑦ ᐊᒻᒪᓗ ᑭᖑᓂᐊᒍᑦ ᒪᑐᔭᐅᓯᒪᓕᖅᐸᑦ ᐱᓕᕆᐊᒃᓴᖓᑦ ᐅᔭᕋᖕᓂᐊᕐᕕᖁᑎᒥᓂᒃ, ᐱᖁᑎᖏᓐᓂᒡᓗ.

ᐊᐅᓪᓛᕈᑎᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ ᒥᓂᔅᑕᖓᑦ ᑲᒪᔨᐅᖓᑦ ᕿᒥᕐᕈᐊᕆᐊᖃᕐᓂᕐᒥᒃ ᐱᓕᕆᐊᕆᔪᒪᔭᖏᓐᓂᒃ ᐱᔾᔪᑕᐅᓗᑎᒃ ᐊᒥᓱᒐᓴᐅᓂᖏᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐱᓕᕆᐊᒃᓴᐃᓪᓗ ᑲᔪᓯᑎᑕᐅᔪᒪᓂᖏᑦ ᒪᓕᒋᐊᖃᕐᒪᑕ ᐊᑐᕆᐊᓕᖕᓂᒃ ᒪᓕᒐᕐᓂᒃ ᐊᒻᒪᓗ ᒪᓕᒐᓪᓗᑐᖏᓐᓂᒃ ᐃᖃᓇᐃᔭᕐᕕᒃᑎᓐᓂ ᑲᒪᒋᔭᐅᕙᒃᑐᓂᒃ. ᐱᓕᕆᐊᖑᔪᒪᔪᑦ ᕿᒥᕐᕈᖅᑕᐅᓯᒪᓂᖏᓐᓂᒃ ᐅᖃᐅᓯᒃᓴᖃᕐᕕᐅᔪᑦ ᓇᐃᓈᖅᓯᒪᔪᓂᒃ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᐊᐅᓛᕈᑎᓕᕆᔨᒃᑯᓐᓂᒃ ᑲᓇᑕᒥ, ᐊᑐᕐᑯᔭᐅᔪᓂᒡᓗ ᐅᓂᒃᑳᖅᓯᒪᑦᑎᐊᖅᑐᓂᒃ ᒪᑯᓂᖓ ᒪᓕᒋᐊᖃᕐᓂᖏᓐᓄᑦ ᒪᓕᒐᕐᓂᒃ ᐱᔾᔪᑎᖃᕐᒪᑕ: *ᐃᖏᕐᕋᕕᐅᕙᒃᑐᓂᒃ ᓴᐳᓐᓂᐊᖅᑕᐅᔭᕆᐊᖃᕐᓂᖏᓐᓄᑦ ᒪᓕᒐᐃᕐ,* (NPA), *ᑲᓇᑕᒥ ᐅᒥᐊᕐᔪᐊᓕᕆᓂᕐᒧᑦ ᒪᓕᒐᐃᕐ, 2001* (CSA 2001), ᐅᑭᐅᖅᑕᖅᑑᓂᕐᒥ ᓱᕈᕐᓇᖅᑐᖃᖅᑎᑦᑎᑕᐃᓕᒪᔭᕆᐊᖃᕐᓂᕐᒧᑦᑦ ᒪᓕᒐᐃᑦ (AWPPA), *ᑕᕆᐅᕐᒦᓐᓂᕐᒧᑦ ᐸᓯᒃᓴᐅᔾᔪᑕᐅᔪᓐᓇᕐᓂᖏᓐᓄᑦ ᒪᓕᒐᐃᑦ* (MLA), ᑕᕆᐅᕐᒥ ᐃᖏᕐᕋᕕᐅᕙᖕᓂᖏᓄᑦ ᓇᓪᓕᐅᒃᑯᒫᒃᓴᖃᕆᐊᖃᕐᓂᕐᒧᑦ ᒪᓕᒐᐃᑦ (MTSA), *ᐅᓯᔭᐅᔪᖃᕐᓂᕐᒧᑦ ᐱᖁᑎᓂᒃ ᐅᓗᕆᐊᓇᖅᑐᓕᖕᓂᒃ ᒪᓕᒐᐃᑦ 1992* (TDGA), *ᓄᓇᓯᐅᑎᑯᑖᖕᓄᑦ ᓴᕕᖕᓂᒃ ᐊᖁᑎᑯᑖᓕᕆᓂᕐᒧᑦ ᐅᓗᕆᐊᓇᖅᑐᖃᕆᐊᖃᖏᓂᖏᓐᓄᓪᓗ ᒪᓕᒐᐃᑦ* ᐊᒻᒪᓗ ᓄᓇᓯᐅᑎᑯᑖᖕᓄᑦ ᐊᖁᑎᑯᑖᓄᑦ ᓴᕖᖕᓄᑦ ᐅᓗᕆᐊᓇᖅᑐᖃᕆᐊᖃᖏᓂᖏᓐᓄᑦ ᒪᓕᒐᓪᓗᑐᖃᕈᑏᑦ ᑐᖓᕕᐅᓂᖏᑦ.

ᐅᖃᐅᓯᒃᓴᕆᔭᐅᔪᓪᓗ ᐊᑐᓕᖁᔭᐅᔪᓪᓗ ᑖᒃᑯᓇᓂ ᑐᓂᕐᕈᑎᒃᓴᑦᑎᓐᓂ ᑎᑎᕋᐃᑦ ᓴᓇᔭᐅᓯᒪᔪᑦ ᖃᓄᖅᑑᕈᑕᐅᓇᓱᒃᓯᑎᒃ ᐃᓱᒪᓘᑕᐅᔪᓄᑦ ᐊᐅᓛᕈᑎᓕᕆᔨᒃᑯᑦ ᑲᓇᑕᒥ ᑎᓕᔭᐅᓯᒪᓂᖏᓐᓂᒃ ᑲᒪᒋᔭᕆᐊᖃᓲᕆᔭᖏᓐᓂᒃ ᐊᒻᒪᓗ ᒪᓕᒐᓪᓗᑐᕆᔭᐅᔪᓂᒃ ᒪᓕᒋᐊᖃᕐᒪᑕ, ᐱᓗᐊᖅᑐᒥᒃ ᐱᔾᔪᑎᖃᖅᑐᓂᒃ ᓄᓇᒃᑰᕈᑎᑯᑖᖕᓄᑦ ᓴᕕᖕᓂᒃ ᐊᖁᑎᑯᑖᖕᓂᒃ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥ ᐅᓗᕆᐊᓇᖅᑐᖃᕆᐊᖃᕐᓂᕐᒥᒃ ᐱᔪᓂᒃ. ᓄᑖᓂᒃ ᖃᐅᔨᒪᔾᔪᑎᒃᓴᓂᒃᓯᓐᓂᕈᑎᒃ ᐱᔾᔪᑎᖃᖅᑐᓂᒃ ᐊᐅᓪᓛᕈᑎᓕᕆᓂᕐᒥᒃ ᐱᔾᔪᑎᖃᖅᑐᓂᒃ ᑲᓇᑕᒥ ᐊᐅᓚᑕᐅᕙᒃᑐᓂᒃ, ᐅᖃᐅᓯᐅᒍᑎᒃ ᑕᐃᑲᓂ ᐱᓕᕆᐊᕆᔪᒪᔭᖏᓐᓂᒃ ᕿᒥᕐᕈᐊᕐᓂᕐᒧᑦ ᑲᑎᒪᔾᔪᑕᐅᓂᐊᖅᑐᓂᒃ, ᐃᖃᓇᐃᔭᕐᕕᒃᑎᓐᓂ ᐋᖅᑭᒋᐊᖅᑕᐅᔪᓐᓇᕗᑦ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᓂᖏᑦ ᐊᑐᕐᑯᔭᓕᐊᖏᓪᓗ ᐅᖃᐅᓯᐅᓯᒪᔪᑦ ᑖᒃᑯᓇᓂ ᑎᑎᕋᖅᓯᒪᔭᑦᑎᓐᓂᒃ.

ᐃᖃᓇᐃᔭᕐᕕᒃᑎᓐᓂ ᓯᕗᒧᑦ ᑕᐅᑐᒃᐳᒍᑦ ᑲᔪᓰᓇᖅᑯᓯᓂᖅ ᐅᖃᖃᑎᒌᒍᓐᓇᕐᓂᑦᑎᓐᓂᒃ ᐃᓚᒋᔭᐅᖃᑦᑕᑦᓂᓪᓗ ᐃᓄᐃᑦ ᑲᑎᒪᔩᓪᓗ ᕿᒥᕐᕈᐊᖅᐸᓪᓕᐊᓂᖏᓐᓂᒃ ᖃᓄᐃᓕᐅᕈᑕᐅᔪᒪᔪᓂᒃ.

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DEFINITION OF ACRONYMS

ASSPPR	Arctic Shipping Safety and Pollution Prevention Regulations
AWPPA	*Arctic Waters Pollution Prevention Act*
CFTR	Cargo Fumigation and Tackle Regulations
CNWA	Canadian Navigable Waters Act
COF	Certificate of Fitness
CSA	*Canada Shipping Act*, 2001
FEIS	Final Environmental Impact Statement
IMSBC	International Maritime Solid Bulk Cargoes Code
MLA	*Marine Liability Act*
NIRB	Nunavut Impact Review Board
NPA	*Navigation Protection Act*
NPP	Navigation Protection Program
OPEP	Oil Pollution Emergency Plan
OUMF	Occasional-Use Marine Facility
RSA	*Railway Safety Act*
TDG	Transportation of Dangerous Goods
TDGA	Transportation of Dangerous Goods Act, 1992
TC	Transport Canada

1. INTRODUCTION

The Baffinland Iron Mines Corporation (the Proponent) is proposing to develop the Mary River Project Phase 2 proposal in the Qikiqtani Region of Nunavut. The Project includes the expansion of Milne Port to include a second ore dock, the construction of a 110-km railway between the mine site and Milne Port, and the construction, operation, closure and post-closure activities associated with the mine and its infrastructures.

Transport Canada is a Responsible Minister for the NIRB review of the Project because several project components and activities are subject to Transport Canada legislation and regulations. This Technical Review Submission summarizes Transport Canada's mandate, roles and responsibilities, including those defined by legislation, regulations, guidelines and policies that are applicable to the Project. Specific recommendations have been provided with respect to the *Navigation Protection Act* (NPA), *Canada Shipping Act, 2001* (CSA 2001), *Arctic Waters Pollution Prevention Act* (AWPPA), *Marine Liability Act* (MLA), *Marine Transportation Security Act* (MTSA), the *Transportation of Dangerous Goods Act, 1992* (TDGA), the *Railway Safety Act* and the Railway Safety Act Regulatory Framework.

The Department will continue to work with all stakeholders, including the Proponent, throughout the environmental assessment and regulatory processes to address areas within Transport Canada's jurisdiction.

2. TRANSPORT CANADA'S MANDATE, ACTS AND REGULATIONS

Transport Canada is responsible for transportation policies and programs that promote an integrated transportation system that is safe, secure, efficient and environmentally responsible. The Department also has a responsibility to regulate associated transportation infrastructure, equipment and personnel in accordance with legislation and regulations within its mandate. The following section describes the Acts and Regulations relevant to the Project.

2.1 *Navigation Protection Act*

The *Navigation Protection Act* (NPA) authorizes and regulates interferences with the public right of navigation in navigable waters listed in the Schedule to the Act, such as the Arctic Ocean. The NPA also enables owners of works on navigable waters not listed in the Schedule to the NPA, to request to opt into the regime and seek Transport Canada approval of their proposed works. Transport Canada administers the NPA through the Navigation Protection Program (NPP).

2.1.1 *Navigation Protection Act* Requirements

The NPA requires that a Notice to the Minister be submitted by the Proponent for all works constructed, placed, altered, repaired, rebuilt, removed or decommissioned in a waterway on the List of Scheduled Waters, unless the work meets the criteria set out in the Minor Works Order. A Notice to the Minister refers to all of the Proponent's submission requirements, including the NPP Notice of Works form and other relevant information required for the review of the project.

NPA approvals may be issued only after: (1) a successful decision document is issued by NIRB indicating that the Project can proceed to the regulatory phase, and; (2) the Crown's legal duty to consult is fulfilled in relation to the Project and its components subject to the NPA. Any other requirements specific to the regulatory review must also be completed prior to issuance of an approval. Transport Canada may include terms and conditions within the NPA approvals that mitigate, as necessary, any interference with navigation as a result of the proposed project components.

2.1.2 *Canadian Navigable Waters Act*

In February 2018, the Government of Canada introduced amendments to the NPA in Parliament as part of Bill C-69, to create a new Canadian Navigable Waters Act (CNWA). The proposed CNWA restores and better protects the right to travel on all navigable waters in Canada, advances reconciliation and establishes new opportunities for Indigenous peoples to partner with Canada. The CNWA also creates more accessible and transparent processes and improves the efficiency and effectiveness of the navigation protection system.

Bill C-69 must still be passed by Parliament and further changes to the proposed legislative amendments may be made as the Bill proceeds through the Parliamentary process and should not be considered final until the Bill has received Royal Assent.

Should the Project be approved to proceed, Transport Canada will review the Project applications pursuant to the applicable legislation at that time. The recommendations and advice provided by Transport Canada in this submission have also taken into consideration any potential changes under the proposed CNWA.

2.1.3 Aboriginal Consultation

The Crown has a legal duty to consult with Indigenous groups when its contemplated conduct may adversely impact potential or established Aboriginal or treaty rights. The legal duty to consult is based on the Supreme Court of Canada's interpretation of the obligations of the Crown in the context of potential and established Aboriginal and treaty rights (Section 35 rights) of the Aboriginal peoples of Canada as recognized and affirmed in Section 35 of the *Constitution Act*, 1982.

Consultation with local stakeholders to determine potential impacts of work on Aboriginal or Treaty rights, and acceptable mitigation measures to address those impacts, should be completed prior to submitting a Notice of Work and/or a request to opt-in a work on a non-scheduled water under the NPA during the regulatory phase.

Transport Canada is participating in the coordinated 'whole of government' Aboriginal consultation resulting from the Northern Project Management Office and the NIRB assessment processes. In the regulatory phase, Transport Canada will use the NIRB process, to the extent possible, for the review and approval of applications received under the NPA.

2.2 Marine Transportation Safety and Security

The *Constitution Act, 1867* grants the federal government exclusive legislative jurisdiction over navigation and shipping, coastal fisheries and aids to navigation such as beacons, buoys and lighthouses. For inland waters, the *Canada Shipping Act, 2001* and the *Marine Liability Act* combine to provide Canada's operational regulatory regime governing marine safety and environmental protection issues.

Transport Canada is the lead federal department that regulates shipping, however it recognizes that other federal agencies and departments, such as Fisheries and Oceans Canada, the Canadian Coast Guard and Environment and Climate Change Canada, have distinct but interrelated responsibilities for the management of marine transportation safety and environmental protection. Transport Canada works with these federal agencies and

departments to establish the regulatory framework and mechanisms which provide a coherent and consistent approach to marine transportation safety and environmental protection. The list below identifies the principal statutes, relevant to the Project, which Transport Canada enforces to help ensure that marine transportation is safe, secure and environmentally responsible.

2.2.1 *Canada Shipping Act, 2001*

The *Canada Shipping Act, 2001* (CSA) provides an overall regime to protect the safety and the environment for vessels operating in waters under Canadian jurisdiction. Its regulations include requirements for a vessel‘s construction, management of ballast water, pollution control, arrangements for emergency response, and crew qualifications. Pollution response and prevention measures apply in respect of vessels in Canadian waters or waters in the exclusive economic zone of Canada.

Transport Canada is the lead federal regulatory agency responsible for the National Marine Oil Spill Preparedness and Response Regime. Part 9 of the CSA, 2001 sets controls to prevent pollution and to manage ballast water from ships. Under this Part, the Vessel Pollution and Dangerous Chemicals Regulations set standards for vessel construction and onboard management to prevent pollution from oil, hazardous chemicals, sewage, garbage, and air emissions.

2.2.2 *Arctic Waters Pollution Prevention Act*

The *Arctic Waters Pollution Prevention Act* (*AWPPA*) provides enhanced environmental protection with respect to vessels operating in waters under Canadian jurisdiction north of 60° North latitude. Canada has developed new regulations, the Arctic Shipping Safety and Pollution Prevention Regulations (ASSPPR) that incorporate the Polar Code, with the addition of specific Canadian modifications designed to provide clarity on discharge requirements for the prevention of pollution by oil, by sewage, and by garbage from vessels, as well as the control of pollution by noxious liquid substances in bulk.

While the provisions of the CSA, 2001 and its associated regulations apply in all Canadian waters, vessels in Arctic waters north of 60° North and out to the 200 nautical mile limit of Canada‘s Exclusive Economic Zone, are also subject to the provisions of the AWPPA. There is one notable exception to provisions in the Arctic compared to elsewhere in Canada: discharge limits. The AWPPA prohibits discharges of oil, chemicals, garbage and other wastes generated on board vessels. The exception is untreated sewage which may be discharged.

The following key regulations support the AWPPA:

- The Arctic Shipping Pollution Prevention Regulations set requirements for how vessels operating in Arctic waters must be built and details conditions of the no-discharge

regime. These regulations also establish vessel control systems for preventing a vessel from operating in ice conditions which exceed its capability.

- The Arctic Waters Pollution Prevention Regulations which include a civil liability regime for vessels to ensure there is insurance coverage for damages should deposits of wastes occur.

2.2.3 *Marine Liability Act*

The *Marine Liability Act* (MLA) is the principal legislation dealing with the liability of ship-owners and vessel operators in relation to passengers, cargo, pollution and property damage and is based on the polluter pay principle. It establishes uniform rules on liability and compensation by balancing the interests of ship-owners and other parties involved in maritime accidents. The MLA sets out a regime that requires vessels operating in Canadian jurisdiction to carry insurance to pay for damages from oil spills.

2.2.4 *Marine Transportation Security Act*

The *Marine Transportation Security Act* (MTSA) sets out a regime to protect and preserve the efficiency of Canada's marine transportation system against unlawful interference. It applies to vessels and marine facilities in Canada, Canadian vessels outside of Canada and marine installations and structures. The MTSA provides the Minister of Transport with the authority to create regulations, security measures and rules to protect the security of Canada's marine transportation system.

The Department helps the industry achieve compliance with marine security legislation and regulations through awareness, certification, inspection, and enforcement, and helps ports, marine facilities and vessels implement the International Ship and Port Facility Security (ISPS) Code through the Marine Transportation Security Regulations (MTSRs).

2.3 Transportation of Dangerous Goods Act, 1992

The *Transportation of Dangerous Goods Act*, 1992 (TDGA) regulates the transportation of dangerous goods by air, marine, rail and road. The TDGA and its regulations are focused on preventing hazardous incidents when dangerous goods are imported, handled, offered for transport or transported. The TDGA identifies the safety and security requirements during the importation, handling, offering for transport and transportation of dangerous goods; provides for the designation of inspectors and sets out their powers and responsibilities; and outlines the offences and the penalty provisions for the offences.

2.3.1 Transportation of Dangerous Goods Regulations

The Transportation of Dangerous Goods Regulations, adopted by all provinces and territories, establishes the safety requirements which support minimizing the impact of incidents involving the transportation of dangerous goods. These requirements include classification, documentation, packaging, safety marks, training, emergency response assistance plans and incident reporting when dangerous goods are imported, handled, offered for transport or transported in Canada. Transport Canada administers the Transportation of Dangerous Goods Regulations under the TDGA.

2.4 *Rail Transportation Safety*

Transport Canada is responsible for developing and implementing policies, regulations and services, as well as the overall administration of the *Railway Safety Act* (RSA) and also overseeing operating rules that are developed and applied by the railway industry. Transport Canada advances the safety of the Canadian rail transportation system through regulation, outreach and oversight towards a national rail transportation system that Canadians recognize as safe and efficient.

2.4.1 *Railway Safety Act* & the Regulatory Framework

The regulatory framework for railway safety encompasses the legislation, regulations, rules, and engineering standards that provide the structure in which railway companies can operate safely. Several federal statutes play a role in the regulation of railways, the most important of which is the RSA, together with the regulations and rules made pursuant to it. Other federal legislation affecting railway safety includes: the *Canada Transportation Act*, the TDGA, the *Canadian Transportation Accident Investigation and Safety Board Act* and the Canada Labour Code.

Transport Canada's Rail Safety program includes monitoring and enforcement activities. Transport Canada monitors for overall compliance to determine if railway companies are complying with the regulatory requirements of the RSA. Activities include audits, inspections and complaint handling.

As part of the Project, a railway will be built to transport iron ore between the mine site and the port. The railway will require a Certificate of Fitness (COF) to be issued by the Canadian Transportation Agency, and would be subject to the RSA and the related rail safety regulatory framework.

3. TRANSPORT CANADA'S TECHNICAL REVIEW COMMENTS

Transport Canada has structured its final comments to meet the submission requirements specified by NIRB on December 21, 2018. Transport Canada has provided references or justifications for the specific issues noted and recommendations.

Review Comment Number	1 – Navigation Protection Program
Subject/Topic	Construction of the freight dock and of the Second Ore Dock at Milne Port; Expansion of the Milne Port PDA
References	3.3.2 Table 3-1 pg. 3.5; 4.1.3 pg.4.5; 10.8 pg. 10.25; TSD 13 Section 4.1
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Milne Inlet is a Scheduled water under the NPA and will require the Proponent to obtain an NPA approval prior to construction. During the regulatory review of the Project, Transport Canada will identify any potential impacts to navigation from the work and will include mitigation measures required to minimize the potential impact on navigation in any approval. Specific mitigation measure will not be developed until an application, including the final design drawings, have been received. The terms and conditions associated with a potential approval are project specific, but may make reference to the installation of signage, lighting and other specific requirements during the time of construction. Work must not commence until an approval is issued by Transport Canada.
Recommendation/Request	The Proponent must submit an application to Transport Canada for all works, including any temporary works, within Milne Inlet and not commence construction of these works until an approval is issued. The Proponent will have to comply with terms and conditions that Transport Canada includes in the approvals until such time that the proposed works are decommissioned, or ownership is transferred. In addition, the conditions and characteristics displayed in the engineered drawings provided during the approval process, need to remain the same in order for the approval to be valid. If, at the completion of the Project the ownership of the proposed works is transferred, the Proponent must notify Transport Canada and appropriate action related to the approval will be reviewed. If and when the works are decommissioned at the end of the Project, an approval may be required from

	Transport Canada for any in water work. In order to ensure that the approval terms and conditions are complied with, Transport Canada officers will conduct compliance monitoring, which may include on-site inspections during or post construction. Based on our analysis, Transport Canada is of the opinion that the potential substantial interference to navigation from the proposed works can be mitigated through the Department's regulatory process; and with the Proponent's adherence to the conditions outlined in the navigation approvals.

Review Comment Number	2 – Navigation Protection Program
Subject/Topic	North Railway and Milne Tote Road watercourse and drainage crossings
References	3.3.2 Table 3-1 pg. 3.5; 4.1.3 pg.4.5; 10.8 pg. 10.25; TSD 13 Section 4.1; TSD 13 Table 4.1;
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	All water crossings identified by the Proponent do not cross navigable waters that are listed in the Schedule to the NPA. Consequently, these proposed in-water works do not require the Proponent to make an application or give notice to Transport Canada. If an opt-in request is accepted by Transport Canada, then all provisions and review processes of the NPA would apply to the works.
Recommendation/Request	Transport Canada recommends that the Proponent undertake a full assessment on impacts to navigation for the in-water works on non-Scheduled waterways. The responsibility to assess and address potential impacts to navigational access and safety resulting from these works rests with the Proponent.

Transport Canada has submitted information requests related to Rail Transportation Safety during the Information Request phase and have had subsequent discussions with the Proponent related to these requests. The Proponent has provided the Advance Technical Comment Responses Phase 2 Proposal – Mary River Project, Appendix 9 GWCI Policies Phase 2 Proposal – Mary River Project, and Appendix 10 Profile Plan Drawings Phase 2 Proposal – Mary River Project to Transport Canada. It is likely that the documentation provided addresses many of the concerns noted below however, the Department is currently reviewing the information provided for completeness.

Review Comment Number	3 – Rail Transportation Safety
Subject/Topic	Rail Safety - General
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The applicability and adequacy of existing Rail Safety regulations, rules and standards given the challenges presented by the uniqueness and environmental sensitivity of the location of the proposed railway. The existing legislated Rail Safety requirements are minimum (not maintenance) requirements for railways and conditions common to southern Canada and may not be adequate for railway operations in the north. There is a lack of information regarding the Proponent's operation and maintenance plans and standards to ensure safety.
Recommendation/Request	It is recommended that the Proponent provide operation and maintenances standards, plans and procedures that have been specifically designed to reflect the challenges presented by the uniqueness of the environment, geology and climate conditions of the proposed railway. It is recommended that the Proponent demonstrate how training, qualification and oversight of railway activities will occur.

Review Comment Number	4 – Rail Transportation Safety
Subject/Topic	Rail Infrastructure - General
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)

Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The adequacy of railway infrastructure - load distribution and restraint has not been demonstrated. There is a lack of detail provided regarding infrastructure design and assumptions made to determine design parameters.
Recommendation/Request	It is recommended that the Proponent provide Railway Plans and Profile showing main and siding track locations, gradients, curvature, switches, bridge and culvert locations, road crossing locations. As well as details regarding railway infrastructure: • Rail type (CWR, bolted), weight and length; • Railway tie type, dimensions, spacing; • Fastening system (plate size and fasteners, longitudinal anchoring) • Ballast depth, shoulder width; • Track modulus assumptions; • Switch/Turnout design details; • Bridge design and foundation details; • Signal and communication and systems details; • Wayside inspection systems details; • Geothermal insulation/protection; • Wildlife corridor design; and • Road /ATV/Snowmobile Crossing design.

Review Comment Number	5 – Rail Transportation Safety
Subject/Topic	Rail Infrastructure - Track Strength
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The adequacy of railway infrastructure - subsurface load bearing capacity has not been demonstrated. There is a lack of information regarding testing done to confirm geological assumptions and corrective measures for areas of identified weakness.
Recommendation/Request	It is recommended that geotechnical sampling and testing to be done to determine makeup and load bearing capacity of proposed railway subgrade; areas of weak subgrade or areas susceptible to recurrent conditions that may significantly affect railway infrastructure (e.g. permafrost, flooding) be identified; and a summary of maintenance experience from the

	operation of Mine Road be provided including: areas of soft or problematic subgrade, permafrost, areas with high rates of runoff or susceptible to overland flooding, excessive snow drifting and avalanche susceptibility.

Review Comment Number	6 – Rail Transportation Safety
Subject/Topic	Rail Infrastructure - Track Inspection and Maintenance
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Adequacy of time allotted for track inspections and maintenance activities. The adequacy of visual track inspections and the ability to detect deteriorating track conditions due to; snow, lack of ambient light, quickly changing conditions caused by high tonnage or weakened track structure (i.e. discontinuous or disturbed permafrost, water penetration) have not been established. The existing maintenance and inspection frequencies identified in Transport Canada Track Safety Rules are minimum standards and the frequencies are based on optimal conditions and 100% compliance. Consideration must be given to the railway operating conditions. There is a lack of information regarding the Proponent inspection frequencies and maintenance plans to ensure minimum standards are not exceeded.
Recommendation/Request	It is recommended that the Proponent provide the following: - Details regarding the plan/assumptions made regarding time allotment for daily train operations and maintenance activities; - Details regarding lighting, snow clearing or other methods to ensure that track inspectors are capable of observing track conditions; - Details regarding the Proponent track maintenance standard practices and procedures: o regarding visual inspection frequency o regarding construction and maintenance of continuous welded rail o regarding rail wear monitoring and mitigation

	o regarding electronic geometry testing and frequency o regarding electronic rail testing and frequency including rail flaw mitigation o regarding areas of high curvature o regarding the use of lubricators/greasers o regarding snow clearing for inspection purposes o regarding monitoring and protection for broken rails o regarding monitoring and protection for avalanches and slides.

Review Comment Number	7 – Rail Transportation Safety
Subject/Topic	Rail Infrastructure- Track Inspection and Maintenance Personnel
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	There is a concern regarding the lack of availability of personnel with track inspection and maintenance experience. The Proponent information lacks details regarding hiring, training and oversight of track maintenance personnel.
Recommendation/Request	It is recommended that the Proponent provide: - Details regarding the plan for hiring, training, qualification and oversight of track inspection and maintenance personnel; and - Details regarding operational restrictions during initial start-up and familiarization of track inspection maintenance personnel.

Review Comment Number	8 – Rail Transportation Safety
Subject/Topic	Rail Signal and Communication - General
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion**	Transport Canada has concerns regarding train control, broken rail protection and crossing warning system equipment failures as there is a lack of information provided on these items.

3. Reasons for disagreement with Addendum conclusion	
Recommendation/Request	It is recommended that details regarding train control and crossing warning signal systems and operational practices related to them be provided.

Review Comment Number	9 – Rail Transportation Safety
Subject/Topic	Rail Signal and Communication - Inspection and Maintenance Personnel
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	There is concern regarding the lack of availability of personnel with signal and communication inspection and maintenance experience. The Proponent information lacks details regarding hiring, training and oversight of signal and communication inspection and maintenance personnel.
Recommendation/Request	It is recommended that the Proponent provide the following: - Details regarding plan for hiring, training, qualification and oversight of signal and communication inspection and maintenance personnel; and - Details regarding operational restrictions during initial start-up and familiarization of signal and communication inspection maintenance personnel.

Review Comment Number	10 – Rail Transportation Safety
Subject/Topic	Rail Operations – Operating Personnel
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Transport Canada has concerns regarding the lack of availability of personnel with train operating experience. The Proponent information lacks details regarding hiring, training and oversight of train operating personnel.
Recommendation/Request	It is recommended that the Proponent provide details regarding the plan for hiring, training, qualification and

	oversight of train operating personnel; and details regarding operational restrictions during initial start-up and familiarization of train operating personnel.

Review Comment Number	11 – Rail Transportation Safety
Subject/Topic	Rail Operations – Operating
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Transport Canada has concerns regarding: - operating practices in mountainous terrain; - switching operations; - train control in areas with steep gradients; and - a lack of information regarding operational practices.
Recommendation/Request	It is recommended that the Proponent provide details regarding: - train operating procedures in areas with steep gradient; - train operating procedures in areas with sharp curvature; - train operating procedures in areas with avalanche or slide risk; - lighting in areas (yards) with significant switching; and - train control in areas with steep gradients.

Review Comment Number	12 – Rail Transportation Safety
Subject/Topic	Rail Operations – Environment
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The section lacks information related to wildlife-rail interactions and there is an outstanding concern regarding operating practices related to wildlife.
Recommendation/Request	It is recommended that the Proponent provide: - Detail regarding train operating procedures in wild life corridors; and - Details regarding the effects of train whistling (i.e. at

	crossings and during switching operations) on wildlife and proposed mitigation measures.

Review Comment Number	13 – Rail Transportation Safety
Subject/Topic	Rail Operations - Communication
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Based on the lack of information related to communications with operating personnel, Transport Canada has concerns regarding communication with trains for operational purpose.
Recommendation/Request	It is recommended that details be provided regarding the method of communicating operating instructions to operating personnel, including emergency broadcasts.

Review Comment Number	14 – Rail Transportation Safety
Subject/Topic	Rail Operations – Operation during extreme or adverse weather conditions
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Proponent information lacked the description of Risk Control Measures that would be used during periods of extreme cold or adverse environmental conditions.
Recommendation/Request	It is recommended that specific plans and operational restrictions during periods of extreme cold or adverse environmental conditions such as blizzards, whiteouts, spring runoff, and water high water be developed and provided as well as a plan for clearing snow from rail line.

Review Comment Number	15 – Rail Transportation Safety
Subject/Topic	Rail Equipment – Equipment Specifications
References	Appendix AD – Railway Operation and Maintenance Plan (page 9 of 22)
Detailed Review Comment	The information provided does not include details

1. Gap/Issue **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	regarding the design of the proposed railcar; nor confirm that the design is suited for this application and location.
Recommendation/Request	It is recommended that details regarding car type and design as well as confirmation of suitability for this application and location be provided.

Review Comment Number	16 – Rail Transportation Safety
Subject/Topic	Rail Equipment – Equipment Personnel
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	There is concern regarding the lack of availability of personnel with equipment inspection and maintenance experience in this region. The Proponent has not provided information regarding hiring, training and oversight of equipment maintenance personnel.
Recommendation/Request	It is recommended that the Proponent provide details regarding plans for hiring, training, qualifying and for the oversight of equipment inspection and maintenance personnel. Details should also be provided regarding operational restrictions during initial start-up and familiarization of equipment inspection and maintenance personnel.

Review Comment Number	17 – Rail Transportation Safety
Subject/Topic	Railway Equipment – Braking system
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Railway Operation and Maintenance Plan lacked information regarding: - equipment braking effectiveness due to cold weather; - train control in areas with steep gradients; and - equipment type and braking systems and procedures.
Recommendation/Request	It is recommended that details regarding railway equipment type, load capacity, braking systems be provided.

Review Comment Number	18 – Rail Transportation Safety
Subject/Topic	Railway Equipment – Locomotive and Equipment Maintenance
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Proponent information lacks details regarding planned equipment maintenance inspections and procedures.
Recommendation/Request	It is recommended that details regarding the following be provided: - locomotive maintenance plans and procedures; - equipment maintenance inspection procedures including how railcar inspections will meet the requirements of intervals; and - inspection plans for lighting at ports and mine sites.

Review Comment Number	19 – Rail Transportation Safety
Subject/Topic	Railway Equipment - Wayside Inspection Systems
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Proponent information lacks details regarding wayside inspection systems resulting in concerns regarding in service equipment failure.
Recommendation/Request	It is recommended that the Proponent provide details regarding wayside inspection systems and operational practices related to them.

Review Comment Number	20 – Rail Transportation Safety
Subject/Topic	Railway Equipment - General
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix AD – Railway Operation and Maintenance Plan (pages 3699-3729)

Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Proponent information lacks details regarding derailment response equipment and results in a concern regarding the ability to respond to derailments.
Recommendation/Request	It is recommended that the Proponent provide details regarding type and location of equipment for derailment response.

Review Comment Number	21 – Transportation of Dangerous Goods
Subject/Topic	Commercial Carrier Spill Response - General
References	Phase 2 Development Plan, Technical Supporting Document TSD 28 Appendix G – Hazardous Materials and Hazardous Waste management plan (pages 21-39)
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The information provided results in concerns regarding available commercial transportation companies with first response and clean-up capacities in the region.
Recommendation/Request	It is requested that the Proponent provide a list of the commercial transportation companies to be retained which have first response and clean-up capacities operating in the North Baffin region.

Review Comment Number	22 – Transportation of Dangerous Goods
Subject/Topic	Hazardous Materials and Hazardous Waste Management Plan
References	Page 797 Section 3.1 4th paragraph
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Hazardous Materials and Hazardous Waste Management Plan current states: In Canada, the production, storage, and use of AN and explosive materials are subject to strict precautionary measures under the Explosives Act and Regulations, and the Canada Transportation Act, Ammonium Nitrate Storage Facilities Regulations. This wording has slight inaccuracies.
Recommendation/Request	It is recommended that the language above be changed to the following: In Canada, the production, storage, and use of AN and

	explosive materials are subject to strict precautionary measures under the *Explosives Act* and Regulations, and the Ammonium Nitrate Storage Facilities Regulations. Explosives are subject to the *Transportation of Dangerous Act* and Regulations during transportation via all modes.

Review Comment Number	23 – Transportation of Dangerous Goods
Subject/Topic	Hazardous Materials and Hazardous Waste Management Plan
References	Page 808 Table 4-2
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Table 4-2 referenced contains errors.
Recommendation/Request	It is recommended that the Proponent refer to the Safety Data Sheets for classification of Drums-empty and Drums-Residue containers and update the General Management Method on Table 4-2.

Review Comment Number	24 – Transportation of Dangerous Goods
Subject/Topic	Waste Management Plan
References	Pages 747-751 Table 3-2 Waste Handling and Disposal Page 808 Table 4-2
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The shipment of hazardous wastes, which are dangerous goods, is subject to the Transportation of Dangerous Goods Regulations. Baffinland reports the following information annually: - The quantities hazardous materials and hazardous wastes transported off-site for disposal; - The location and name of the disposal facility for each hazardous materials and hazardous wastes type; - The date hazardous wastes were transported off-site for disposal;
Recommendation/Request	- It is requested that the Proponent include documentation related to all hazardous wastes subject to the TDG Regulations be included in the information reported annually.

Review Comment Number	25 – Marine Transportation Safety and Security
Subject/Topic	Marine Shipping
References to NIRB revised EIS Guidelines (if applicable), Main Addendum and TSD (i.e. document section/sub-section, page number, etc.)	TSD 02, Project Description Mary River Project Phase 2 Proposal, section 5.1 and 5.2.1
Summary (include Baffinland's conclusion if relevant and conclusions of the commenting party)	The Proponent has referred to compliance with regulatory requirements and has provided that the amount of vessel traffic calling on Milne Port will increase with the Phase 2 Proposal and shipping will also occur, as required, during periods of ice-break up (early July) and ice formation (up to mid-November) which will effectively extend the annual shipping window to approximately 137 days. It should be noted that all shipping activities are required to be undertaken as per the regulatory requirements and in a safe manner
Importance of issue to impact assessment	Compliance with the regulatory requirements and safety of navigation.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Canada has developed new regulations, the Arctic Shipping Safety and Pollution Prevention Regulations (ASSPPR) that incorporate the Polar Code with the addition of specific Canadian modifications designed to provide clarity on discharge requirements for the prevention of pollution by oil, by sewage, and by garbage from vessels, as well as the control of pollution by noxious liquid substances in bulk.
Recommendation/Request	The Proponent is to ensure that there are practices and procedures in place for the safe management of the increase in vessel traffic and window of operations. Vessels calling Milne Port are required to adhere to regulatory requirements.

Review Comment Number	26 – Marine Transportation Safety and Security
Subject/Topic	Port Facilities
References to NIRB revised EIS Guidelines (if applicable), Main Addendum and TSD (i.e. document section/sub-section, page number, etc.)	TSD 02, Project Description Mary River Project Phase 2 Proposal, section 4.2 and 4.3.2.
Summary (include Baffinland's conclusion if relevant and conclusions of the	The proponent has indicated that a second ore dock capable of berthing Capesize ore carriers will be

commenting party)	required to be able to deliver 12 Mtpa of ore to market via Milne Port. A second ship loader with a capacity of 16,000t/h will be constructed to fill vessels berthing at the new Capesize dock. It should be noted that Proponent needs to comply with regulatory requirements with respect to ship loader and have due consideration to the vessel safety in the Port.
Importance of issue to impact assessment	Compliance with the regulatory requirements and safety of navigation.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Proponent is to consider deep drafts of the Capesize vessels and required under keel clearance in construction of the ore dock. A ship loader falls under the definition of category 5 lifting appliances under Part 3 (Tackle) of the Cargo Fumigation and Tackle Regulations (CFTR). Please note that under s.301(3) of the CFTR, as an alternative to compliance with sections 302 to 359 of the CFTR, the Minister of Transport may allow the lifting appliances to be operated in accordance with: • any regulations of the province in which the lifting appliance is being operated; • standards of the International Standards Organization; or • standards of the Deutches Institut Fur Normung e. V. (DIN) which would result in an equivalent or greater level of safety to that provided for by the CFTR requirements. There are requirements which are applicable to mechanical, electrical, hydraulic and pneumatic systems that are part of a lifting appliance. These requirements include safety factors, testing, thorough examination, inspection certification, maintenance and repair. Lifting appliances shall be tested, thoroughly examined and certified by competent persons who may not necessarily be Marine Safety inspectors. Loading, stowage and transportation of iron ore shall be done in accordance with the International Maritime Solid Bulk Cargoes Code (IMSBC).
Recommendation/Request	The Proponent is required to comply with the Cargo Fumigation and Tackle Regulations (CFTR), International Maritime Solid Bulk Cargoes Code (IMSBC)

	and have due regards to the safety of deep draft vessels in the Milne Port.

Review Comment Number	27 – Marine Transportation Safety and Security
Subject/Topic	The Spill at Sea Response Plan
References to NIRB revised EIS Guidelines (if applicable), Main Addendum and TSD (i.e. document section/sub-section, page number, etc.)	Technical Supporting Document 28, Appendix Q-Spill at Sea Response Plan and section 1.5.7, Table 16.
Summary (include Baffinland's conclusion if relevant and conclusions of the commenting party)	The proponent has indicated that SSRP will be updated as per Table 16 It should be noted as per the submission from the Proponent that shipping will also occur, as required, during periods of ice-break up (early July) and ice formation (up to mid-November). The Proponent is to have plans in place for responding to the spill in the proposed extra time window for shipping, with due regards to ice conditions.
Importance of issue to impact assessment	Pollution response plans
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	Response plans should take into account the challenges of operating in the Arctic. Not that there are no Response Organizations North of 60N. Transport Canada also notes that the Proponent has entered into a contractual agreement with Oil Spill Response Limited of Southampton, UK (OSR) for managing large spills.
Recommendation/Request	The proponent is to update spill response plans as required.

Review Comment Number	28 – Marine Transportation Safety and Security
Subject/Topic	Milne Inlet -Oil Pollution Prevention Plan
References to NIRB revised EIS Guidelines (if applicable), Main Addendum and TSD (i.e. document section/sub-section, page number, etc.)	TSD 28, Appendix N-Oil Pollution Emergency Plan-Milne Inlet (OPEP) and section 1.5.4, Table 15, Page 19.
Summary (include Baffinland's conclusion if relevant and conclusions of the	The proponent has indicated that OPEP will be updated as per Table 15 and fuel transfer will take place in open

commenting party)	water season. It should be noted that the Proponent is required to update the OPEP as per the regulatory requirements and submit for review to Transport Canada, Marine Safety before the commencement of Phase 2 operations.
Importance of issue to impact assessment	Compliance with the regulatory requirements.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD conclusion** **3. Reasons for disagreement with Addendum conclusion**	The Oil Pollution Emergency Plan (OPEP) that is included in this package was submitted to Transport Canada on Sept 14, 2018. The plan was reviewed and found to be in compliance with the CSA and its subtending Regulations. The Proponent has indicated that they would be providing us with an updated OPEP.
Recommendation/Request	The Proponent is required to update the OPEP as per the regulatory requirements.

Review Comment Number	29 – Marine Transportation Safety and Security
Subject/Topic	Marine Security Plan
References to NIRB revised EIS Guidelines (if applicable), Main Addendum and TSD (i.e. document section/sub-section, page number, etc.)	Addendum to the Final Environmental Impact Statement Mary River Project – Phase 2 Proposal, Part 3 - Regulatory and Fiscal Regime, Table 3-1(Current and Required Approvals) and Appendix F, Current and Required Approvals, Page 2.
Summary (include Baffinland's conclusion if relevant and conclusions of the commenting party)	The proponent has advised that approval for the Milne Inlet Marine Facility is operated in compliance with its approved security plan. An amendment or new approval will be required with updates to the security plan. It should be noted that the Milne port marine facility is required to be operated at all times in compliance with the Marine Transportation Security Regulations, including appointing a Marine Facility Security Officer. Any updates and amendments need to be incorporated in the Security Plan and submitted for review and approval from Transport Canada, Marine Security
Importance of issue to impact assessment	Compliance with the regulatory requirements. The proponent is required to update the Security Plan including appointing a Marine Facility Security Officer as per the MTSR.
Detailed Review Comment **1. Gap/Issue** **2. Disagreement with Addendum/TSD**	Any changes to the current infrastructure of the Milne Inlet Marine Facility will require updated procedures to be noted in the Security Plan and re-submitted to

conclusion **3. Reasons for disagreement with Addendum conclusion**	Transport Canada for review and approval.
Recommendation/Request	The Proponent is required to comply with the Marine Transportation Security Regulations. Additionally: 1. The Proponent has incorrectly cited *Port Securities Transportation Act* which should be replaced by Marine Transportation Security Regulations. Note that the Proponent's reference to "*Port Securities Transportation Act*" is not part of Canadian Marine Transportation Security legislation. Ref Technical Supporting Document 28, Shipping and Marine Wildlife Management Plan, Page 43, section 5.7. 2. The Proponent has incorrectly addressed the Milne Inlet facilities as Occasional-Use Marine Facility (OUMF). Note that Milne Inlet is not an OUMF, it is a certified Marine Facility, Ref- Technical Supporting Document 28, Environmental Protection Plan, Page 16. 3. Before the Steensby Marine Facility accepts any vessels that fall under the *Marine Transportation Security Act* or Marine Transportation Security Regulations, a new Security plan, specific to the Steensby Marine Facility, must be created, based on the results of an onsite Security Assessment completed by Transport Canada and then submitted to Transport Canada for review and approval.