

APPENDIX 10D-9

Appendix 10D-9.1 Railway Management Plan

Appendix 10D-9.2 Railway Emergency Response Plan

Preamble

As stated in section 9.1 of the NIRB Guidelines for the Mary River Project, the NIRB recognizes that the development of certain management plans are dependent on the advancement of the Project definition. As the railway will not be operational until 2017, the Railway Management Plan and the Railway Emergency Response Plan fall within this category.

The attached draft Railway Management Plan and the Railway Emergency Response Plan are presented in this FEIS for information purpose. These plans present the current understanding of the railway operation and will be finalized once the final design of the railway and its infrastructure is completed.

APPENDIX 10D-9.1

RAILWAY MAINTENANCE MANAGEMENT PLAN



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1. INTRODUCTION

1.1 PURPOSE

The Railway Management Plan will include procedures and guidance for operations of the railway between the mine site and Steensby Port, including rolling stock management, safety measures, worker training, and emergency response procedures.

Before operations start, the railway will have a fully developed set of operating rules and standard procedures for inspection and maintenance of both rolling stock and infrastructure. These will be documented and copies of the rules and procedures will be provided to pertinent employees and hard copies provided for reference purposes at both the Mary River terminal and the maintenance and operating centre at Steensby. All employees will be briefed on the rules and procedures before operations start.

Environmental concerns/issues arising from the construction phase are addressed in other environmental management plans (see Section 1.3 and Section 2.1)

1.2 REGULATORY REQUIREMENTS

A number of Acts and regulations provide requirements for railway construction and operation. In general these are:

- Territorial Lands Act 1985
- Territorial Land Use Regulations
- Nunavut Waters and Nunavut Surface Rights Tribunal Act 2002
- Canadian Environmental Protection Act
- Transportation of Dangerous Goods Act and Regulations
- Safety Act, Occupational Health and Safety Regulations
- Work Site Hazardous Materials Information Systems Regulations

Acts and regulations specific to railways are:

- Railway Safety Act [Railway Safety Act (1985, c. 32 [4th Supp.]) Royal Assent of Bill C-8 2008.02.28]
- Provisions Related to the Railway Safety Act

Regulations and Orders Pursuant to the Railway Safety Act are:

- Mining Near Lines of Railways Regulations

- Notice of Railway Works Regulations
- Railway Safety Management System Regulations

Rules Pursuant to the Railway Safety Act are:

- Canadian Rail Operating Rules (CROR) with Rules for the Protection of Track Units and Track Work
- Maintenance Rules for LED Signal Modules used in Wayside Signal Systems for the Quebec North Shore and Labrador Railway
- Railway Employee Radio Communication Rules
- Railway Equipment Reflectorization Rules
- Railway Freight Car Inspection and Safety Rules
- Railway Freight and Passenger Train Brake Inspection and Safety Rules
- Railway Locomotive Inspection and Safety Rules
- Railway Medical Rules for Positions Critical to Safe Railway Operations
- Railway Passenger Car Inspection and Safety Rules
- Railway Passenger Handling Safety Rules
- Railway Rules Governing Safety Critical Positions
- Rules for the Control and Prevention of Fires on Railway Rights-of-Way
- Rules for the Installation, Inspection, and Testing of Air Reservoirs (Other than on Locomotives)
- Rules Respecting Track Safety
- Work/Rest Rules for Rail Operating Employees

Standards pursuant to the Railway Safety Act are:

- Standard Respecting Railway Clearance (TC E-05)
- Railway Signal and Traffic Control Systems Standards (TC E-17)
- Standards Respecting Pipeline Crossings Under Railways (TC E-10)
- Standards for LED Signal Modules at Highway/Railway Grade Crossings
- Engineering Standards for LED Signal Modules used in Wayside Signal Systems for the Quebec North Shore and Labrador Railway (TC E-16)

Guidelines of the Railway Safety Act are:

- Canadian Road/Railway Grade Crossing Detailed Safety Assessment Field Guide (TP 14372E) (April 2005)
- Guideline No.1: Procedures and conditions for eliminating whistling at public crossings
- Guideline: Engineering Work Relating To Railway Works (Section 11 of the Railway Safety Act) (TP 13626)
- Guideline for Inspecting and Testing Preemption of Interconnected Traffic Control Signals and Railway Crossing Warning Systems
- Guideline on Applying for an Exemption or Filing of a Notice of Exemption
- Guideline on Requesting Approval to Undertake Certain Railway Works
- Guideline on Submitting Proposed Engineering Standards or Revisions to Engineering Standards
- Guideline on Submitting a Proposed Rule or a Revision to a Rule
- Minimum Railway/Road Crossing Sightline Requirements for All Grade Crossings Without Automatic Warning Devices G4-A

Relevant Federal Policies are:

- Education and Awareness Policy Framework
- Rail Safety: Compliance and Enforcement Policy (September 2007)
- Railway Right-of-Way Access Control Policy
- Railway/Road Grade Crossing Policy

Other related Acts and regulations are:

- Canada Transportation Act
- Canada Labour Code
- On-Board Trains Occupational Safety and Health Regulations

Other regulations relevant to railway operations are:

- Ammonium Nitrate Storage Facilities Regulations (No. 0-36)
- Anhydrous Ammonia Bulk Storage Regulations (No. 0-33)
- Chlorine Tank Car Unloading Facilities Regulations (No. 0-35)
- Flammable Liquids Bulk Storage Regulations (No. 0-32)
- Handling of Carloads of Explosives on Railway Trackage Regulations
- Heating and Power Boilers Regulations (No. 0-11)

- Highway Crossings Protective Devices Regulations (No. E-6)
- Liquefied Petroleum Gases Bulk Storage Regulations (No. 0-31)
- Railway Employee Qualification Standards Regulations (1987-3 Rail)
- Railway-Highway Crossing at Grade Regulations (1980-8 Rail)
- Railway Prevention of Electric Sparks Regulations (1982-8 Rail)
- Railway Safety Appliance Standards Regulations (No. 0-10)
- Service Equipment Cars Regulations (1986-9 Rail)
- Specification 112 and 114 Tank Cars Regulations
- Wire Crossings and Proximities Regulations

1.3 RELATIONSHIP TO OTHER MANAGEMENT PLANS

This plan should be viewed in concert with the following additional plans prepared for the EIS:

- Exploration and Predevelopment Environmental Protection Plan (EPP) - Appendix 10B
- Emergency and Spill Response Plan – Appendix 10C-1
- Surface Water and Aquatic Ecosystems Management Plan – Appendix 10D-2
- Air Quality and Noise Abatement Management Plan – Appendix 10D-1
- Explosives Management Plan – Appendix 10C-4
- Terrestrial Environmental Management and Monitoring Plan – Appendix 10D-11
- Preliminary Closure and Reclamation Plan – Appendix 10G

1.4 BAFFINLAND'S COMMITMENTS

Baffinland provides adequate resources to implement and maintain the EHS Management System, including the necessary human, material and financial resources. For Baffinland's Sustainable Development Policy, see Figure 1.0.

1.5 UPDATE OF THIS MANAGEMENT PLAN

The Railway Management Plan addresses the operation of the railway. It will not be in effect until construction of the railway is completed and the Steensby shipping facilities are operational.

Once the railway is in operation, the plan will be updated as required based on management reviews (see Section 7), incident investigations, regulatory changes, or other Project-related changes.

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Figure 1.0 Sustainable Development Policy

Sustainable Development Policy

We are committed to conducting all aspects of our business in accordance with the principles of sustainable development. Based on our values of protecting the environment, operating safely and fiscally responsible and creating authentic relationships, we will:

Governance

- Evaluate and manage risk on a continuing basis, including those that impact the environment, employees, contractors, local communities, customers and shareholders.
- Ensure adequate resources are available and systems are in place to implement risk-based management systems, including defined standards and objectives for continuous improvement.
- Measure and review performance with respect to our environmental, safety, health, socio-economic commitments and set annual targets and objectives.
- Conduct all activities in compliance with applicable legal requirements and internal standards.
- Implement employee performance review processes to ensure accountability at all levels.
- Communicate this EHS Policy to the public and all employees and contractors.
- Undertake an annual review of this Policy.

Health, Safety Workplace and People

- Strive to achieve a safe workplace for our employees and contractors free from occupational injury and illness.
- Respect human rights, and the traditional culture, values and customs of the Inuit people.
- Report, manage and learn from injuries, illnesses and high potential incidents to foster a workplace culture focused on safety and the prevention of incidents.
- Foster and maintain a positive culture of shared responsibility based on participation, behavior and awareness.

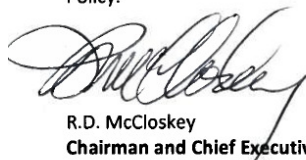
Social and Economic

- Contribute to the social, cultural and economic development of sustainable communities adjacent to our operations.
- Engage with governments, employees, local communities and the public to create a shared understanding of relevant social, economic and environmental issues, and take their views into consideration in making decisions.
- Employ our shareholder's capital effectively and efficiently.
- Demonstrate honesty and integrity by applying the highest standards of ethical conduct.

Environment

- Employ a balance of scientific and traditional Inuit knowledge to safeguard the environment.
- Apply the principles of pollution prevention and continuous improvement to minimize ecosystem impacts, and facilitate biodiversity conservation.
- Use energy, raw materials and natural resources efficiently and effectively.
- Ensure closure plans are in place and progressive reclamation is undertaken to reduce potential long-term environmental and community impacts.

Every employee, contractor, and visitor is expected to demonstrate through their actions a personal commitment to this Policy.



R.D. McCloskey
Chairman and Chief Executive Officer
November 2010



2. TARGETED VECs

For targeted valued ecosystem components (VECs) and valued socio-economic components, see Table 2.1.

Table 2.1 Environmental Management Plan to Reduce Impacts on VECs and VSECs

VECs		Issues/Concerns	Environmental Management Plan
Air quality		Emissions from locomotives	Air Quality and Noise Abatement Management Plan
Noise and Vibrations		Rail traffic	Environmental Protection Plan
Water Quality		Stream crossing blockages/slides/erosion	Railway Management Plan
		Accidental spills	Emergency and Spill Response Plan
Water Quantity		Channel and ecosystem stability post water diversions	Environmental Protection Plan
		Ice damming	
Fish and Fish Habitat		Erosion, stream blockage	Surface Water, Aquatic Ecosystem, Fish and Fish Habitat Management Plan
Terrestrial Wildlife	Caribou	Interruption of migratory process and routes by railway, road, ship track, camps	<ul style="list-style-type: none">- Railway Management Plan- Environmental Protection Plan- Terrestrial Environment Management and Monitoring Plan- Environmental Awareness Induction
		Unsafe passage across/through project infrastructure (i.e., rail cuts, rail embankments and snow banks, open pit)	
		Change in abundance/distribution in RSA	
		Interruption of hunting / increased hunting due to increased familiarity/knowledge of the area	
Human Safety and Health		Ensure the safety of traveling, fishing, hunting/trapping activities for persons using snow mobile, sledges and ATVs in the vicinity of the railway	

The Railway Management Plan outlines specific mitigation measures implemented during the operation phase.

3. MITIGATION MEASURES

3.1 RAILWAY OPERATIONAL APPROACH

The approach to railway operations, rolling stock and infrastructure inspection and maintenance are detailed in Sections 4, 5 and 6 of this management plan. In general the requirements are that of maintaining the rolling stock and fixed plant of the railway, preserving the assets for safe, efficient operation.

3.2 NOISE AND VIBRATION

Noise and vibration caused by train passage are not anticipated to be a major deterrent to normal wildlife behavior. Noise and vibration levels from a well-maintained railway using modern high-efficiency motive power and modern rolling stock is not particularly high, and more

importantly is not long-duration. Disturbance occurs only during actual passage of a train and is thus short-duration and will occur 14 times a day at the most (six roundtrips for ore trains and one for freight trains). Experience elsewhere has indicated that only a short time is needed before local animal populations become familiarized with regular railway activity and ignore it, to the point where in northern Ontario and Québec for example, a major problem relates to beavers damming the culverts beneath the railway line.

3.3 AIR QUALITY AND EMISSIONS FROM LOCOMOTIVES

"Measures to prevent wind blowing fine iron ore and other materials", NIRB Guidelines for Preparation of the EIS, Nov 16, 2009, page 71.

The ore will be transported in open cars. Based on the Bulk Sampling Program experience, dust is not expected to be a concern.

In addition, the rail cars will be designed so that, when fully loaded, the ore pile in the car does not significantly exceed the height of the sides of the car; the approach to ore loading is such that only a low narrow ridge of ore is exposed above the sides of the ore cars, much reducing exposure of the ore to wind.

Emissions from Locomotives

Locomotive emissions comprise NOX, CO₂, CO, hydrocarbons, and particulates. The railway will be using modern high-efficiency AC locomotives that use less fuel and consequently generate fewer emissions than older DC locomotives. Locomotives will meet, as a minimum, EPA Tier 3 emission requirements.

3.4 WILDLIFE INTERACTIONS

Railways are one of the least-intrusive forms of land transportation. Their physical footprint is small compared with a road, emissions are much lower per tonne transported than by truck, and noise levels are less-intrusive because there are comparatively far fewer "passes" per day. Many of the initial impacts in terms of disturbance to wildlife are significantly mitigated over time as the natural population accustoms itself to the change. The greatest potential impact will be in the barrier it might be perceived to represent.

The regularity of the railway service is advantageous in that most wildlife will likely quickly adapt to the passage of trains. However, this is not necessarily a positive outcome in terms of intrusion on the railway line itself. Most railways have some level of animal kills, but many of these occur when animals have found a break in the perimeter fence of the railway property and then find themselves trapped with no egress when a train arrives. In large parts of arboreal Canada, an animal on a rail line often panics and sees the line itself, free of trees and undergrowth, as the quickest route away from the train and then tries to out-run the train. Both these circumstances are not applicable to this railway as the property will not be fenced and the

lack of trees means that there is open land on all sides of the rail line for rapid retreat from an oncoming train.

Because it could take up 1.5 km to stop a fully loaded ore train travelling at 60 km/h, it is almost impossible to stop a train based on visual recognition of a problem. Fortunately, the nature of the caribou could be its greatest protection. Unlike the barren-ground or woodland caribou, the caribou do not travel in large herds, but move in much smaller “family” groups. Some worst-case examples of caribou kills on railway lines have occurred during the migration period when a large herd has started to cross the railway line and the animals then attempt to stay together and complete the crossing before the train arrives. This is unlikely to happen with a small group in the face of an approaching train.

If observations indicate that at well-defined times of the year animals regularly visit the line at particular locations, the operating rules will be amended to require sounding of the horn (or whistle) when approaching those defined locations. Should this prove to be ineffective, alternative solutions will be tested, such as noise makers, propane cannons, and cracker or whistler shells that are sometimes used to scare birds away from crops. These could be connected to motion sensors connected in relay.

In this regard, in specific areas where caribou activity can be expected, existing and apparently well-used trails have been identified in the field, and trails that cross the railway embankment will be re-established by constructing crossings. IQ knowledge has been incorporated into an appropriate design for caribou crossings, by softening the embankment side slopes to an acceptable grade and providing a surface treatment that will make the crossings more accessible to the caribou. There are a handful of sites (six or seven) where identified caribou trails will be interrupted by substantial cuts in steeply sloped rock. These will be treated on a site-by-site basis.

3.5 HUMAN INTERACTIONS

Though the railway mainline crosses territory with no established roads, the area is crossed by land users travelling on ATVs in the summer and on snowmobiles in winter. To a very large extent the railway embankment will be built with run of quarry rock, making it difficult and possibly dangerous to climb with an ATV or skidoo. Consequently, the railway will be built with a number of strategic crossing points for these vehicles. At these locations the embankment will have side slopes and surfaces suitable for safe operation of ATVs and snowmobiles. In addition, the track will be planked to protect the crossing vehicle from getting trapped between the rails. The locations of these crossings will be clearly marked.

Baffinland will consult with the communities, hunters, and fishers to determine preferred locations for these crossings. These discussions will include not only issues related to preference and convenience of the traveler but also safety aspects such as adequate line of sight for both locomotive crews and vehicles using the crossing. The lead locomotive of a train set always travels with headlights on so that, with good lines of sight, the locomotive should be

clearly visible to a crossing vehicle. Since any indicators (board, signs) used to mark these crossings will also provide distinct markers that can be used by travelers crossing the tundra for navigation purposes, the form of these indicators will also be determined during consultations with the communities.

Even in regions where railways and crossings at grade are common, the general population has little understanding of the risks when trespassing across railway property (e.g., pedestrians taking unapproved shortcuts in urban areas or vehicles dashing through grade crossings to minimize travel times). For several years, an education program called “Operation Lifesaver” has been implemented across North America with the support of the railways and has significantly reduced the number of grade-crossing accidents. In Canada it is a partnership initiative of the Railway Association of Canada and Transport Canada, working in cooperation with the rail industry, government, police, unions, and many public organizations and community groups. This program will be adapted to Nunavut’s specific needs and used as the basis of an education program directed toward community groups most likely to be travelling in the vicinity of the railway alignment. The program will also be taught in local community schools, on a regular basis, as long as there is an operating railway in the region.

3.6 SPILL CONTINGENCY

Most “spills” relating to railway operations are the consequence of a derailment. Derailments are typically caused by equipment failure, vandalism, human error, and less commonly, natural disaster.

Given the nature of the operation and the climatic conditions, the railway will be subject to a frequent and strict regimen of regular inspection and preventive maintenance, of both rolling stock and infrastructure.

The remoteness of the site, in conjunction with the planned community education program and regular inspection schedules should minimize the vandalism risk.

Train crew assignments will be planned to ensure that unqualified, fatigued, or sick employees will not operate trains. At a minimum, the following regulations will be respected: Railway Employee Qualification Standards, Railway Medical Rules for Positions Critical to Safe Railway Operations, On-Board Trains Occupational Safety and Health Regulations and Work/Rest Rules for Rail Operating Employees (Train Crew Hours of Service Regulations). To ensure compliance with these regulations for such an isolated railway operation, several members of the railway organization will be multidisciplinary and, although not necessarily members of the train-crewing team, will be qualified and experienced in the operation of trains and available to do so in emergencies.

Nearly all the freight being transported by the railway under the category of dangerous and hazardous goods, except fuel, will be containerized for transportation by sea to Steensby. Dangerous goods will not be removed from containers for rail transportation. The containers will

be lifted onto flat cars specifically constructed to hold and lock the containers in place. All the provisions for safe transportation of these goods at sea will remain in place during rail transportation. Manifests to accompany dangerous and hazardous goods will reflect this routing.

Fuel tank cars for rail transportation of fuel (diesel and gasoline) will exceed the requirements of Specification 112 and 114 Tank Cars Regulations in that the manufacturer will be required to demonstrate security of the loading and unloading devices attached to the car in a derailment situation.

Cars transporting freight to the mine site from Steensby will be configured and assembled in an appropriate train. For example, freight cars will not be added to the regular ore trains because the proper assembly of a train is very particular because of the difference in behaviour of light empty cars and heavy full cars. General freight will be operated as a separate service from ore transport and will be operated as dedicated trains, and thus, be less exposed to the possibility of derailment incidents.

Typically, a railway, compared with other modes of transport, can often provide more reliable service through inclement weather conditions. Regular passage of trains, particularly long heavy trains, tends to keep tracks relatively clear of snow, and the guidance provided by the rails reduces problems relating to poor visibility in fog and whiteout conditions.

During periods of extreme cold (below -49°C) the railway will not operate. Areas subject to rockfall risk will be protected with special fencing connected to the signaling system. The fencing will be designed to break when the rockfall occurs rather than prevent the fall encroaching on the line. The break in fencing would be relayed to the dispatcher through the signaling system and the dispatcher would then alert approaching trains and advise them to proceed with caution and to reduce train speed to a level that would permit stopping within their line of sight. Maintenance crews' vigilance will be high during periods of flooding with daily inspections in areas deemed to be of high risk.

Online equipment failure of any kind will be reported immediately to the dispatcher, who will advise all online trains and maintenance vehicles on appropriate action. Trains are operated with two locomotives as a safety provision, so in the case of an engine failure, many trains will be able to continue on the power of the second locomotive, at low speed to the next siding, clearing the line. In the case of a complete standstill, the train crew will have one fully functional heated cab for refuge.

In the case of equipment failure that results in a derailment or blocking of the line, the dispatcher will be immediately notified; loaded and empty trains will be held at their terminals and equipment will be dispatched. Minor derailments can often be re-railed with light equipment that will be standard equipment for the track maintenance vehicles; more complex incidents will require either a work train or the full emergency train.

The telecommunications and signaling systems are designed at the outset as "failsafe" in that every functionality is designed with multiple duplications to minimize the possibility of complete

failure. The operating rules will clearly state the authorities, responsibilities, and action appropriate for all implicated parties, should a complete communication failure occur. The locomotives will be equipped with cabs specified to provide additional protection from extreme cold and with additional heating capacity for the cab itself. Emergency equipment (protective clothing, emergency rations, and supplemental heating) will also be stored in the cab, so that the cab itself can function as an emergency refuge.

4. RAILWAY OPERATIONS

4.1 OPERATIONS PHILOSOPHY

Given the northern conditions, anticipated slow order variances, and seasonal fluctuations, a defined train schedule will not be used. The short distance involved is conducive to a structured operation with defined periodical operational targets which is considered more achievable and measurable than defined schedules. With the structured operation, trains will operate when ready, thereby producing some opportunity for catch-up.

To eliminate delays due to meet requirements, a structured three train operation with identical train consists will be established with trains operating approximately 2 hour 12 minutes behind the first train. Operating in this manner, the second train will arrive at Mary River just as the first train has finished loading and is preparing to depart: the third train will arrive at Mary River as the second train is preparing to depart.

This approach provides for periods of low train traffic permitting regular access to the loading and unloading facilities and many sections of the railway mainline for maintenance purpose. It will also permit the daily operation of a supply train that does not incur delays to the ore train operation by requiring mainline meets.

4.2 ORE TRAIN

Based on 60km/h mainline speed, three train sets of 110 cars (30 tonne axle load) and two 4,400 hp AC locomotives (nominal weight 186 tonnes) will optimize rolling stock utilization for handling 18.36 MTPY of wet iron ore.

A train of 110 cars with a net tonnage of 94 tonnes per car has a carrying capacity of 10,340 net tonnes. Based on 18.36 MTPY of wet iron ore, 1,776 trains will be required.

A combination of 300 working days per year and average of 10 hour and 32 minutes cycle time (including inspection and fuelling time allotments) permits up to 1,800 trips per year.

4.3 FREIGHT SERVICE

Supplies for both the Mine and Steensby Port will arrive by ship and be stored at Steensby Port. Supplies to the Mine, such as machinery, parts, ammonium nitrate, diesel fuel, etc., will be transported by supply trains, which will operate separately from the ore unit trains. Two main types of supply train will operate: ammonium nitrate and general freight (machinery, parts, etc) trains and fuel trains,. One fuel train and one general freight train per week will be sufficient. Fuel trains will be use tank cars, while ammonium nitrate will be transported in containers on flatcars. Although tonnages do not warrant two locomotives, they are assigned to the supply trains to provide reliability in the remote area. Only in the case of a locomotive shortage would one locomotive be assigned to a supply train

The supply trains will operate such that they do not delay the iron ore unit trains. The supply trains will have a schedule coordinated with the 3-day cycle of the ore trains. They will have a defined day of week operation.

The *Transportation of Dangerous Goods Regulations*, SOR/2011-60 (Amendment 9) [referenced in Section 1.2 of this document] Section 10.6 sets out the “Location of Placarded Railway Vehicles in a Train”. In that Section, the associated Table row 2 prevents Hazardous Commodities of class 1.1 or Class 1.2 from being coupled directly to railway vehicles carrying Class 2, 3, 4, or 5 commodities. Both Diesel Fuel and Jet-A are in Hazard class 3 per Schedule 1 of these regulations. Also per this same schedule, Ammonium nitrate is either in Class 1.1D (if it has more than 0.2 percent combustible substances, including any organic substance calculated as carbon), otherwise it is classed 5.1. Assuming the worst class classification, diesel fuel and ammonium nitrate could be shipped in the same freight goods train, provided that there is a non-hazardous carrying railcar between them. However, in recognition of the community concerns relative to the consequences of a fuel spill due to an incident on the railway, fuel will be transported in a dedicated fuel train.

Tank cars will exceed the requirements of Specification 112 and 114 Tank Cars Regulations; their performance specifications will require the tank cars to have special features to greatly reduce the possibility of spillage in the event of a derailment, these features include:

- Double walls (to reduce the possibility of leakage due to a puncture);
- Shielded bulkhead (this is in addition to the double walls), as the bulkheads, or ends of the tank car have the greatest possibility of being hit by the coupler of an adjacent freight car in the event of a derailment;
- Top loading and unloading valves only. Not having a bottom valve eliminates the chance of fuel dripping out of a leaking valve;
- Shielded valves (reduces the risk of valves located on the top of the tank being sheared off in the case of a roll-over); and

- Double shelf couplers (reduces the risk of uncoupling during a derailment, and if uncoupling does occur, double shelf spreads out the impact force if it hits an adjacent tank car).

4.4 EMERGENCY TRAIN

Due to the remoteness of the rail network, an emergency train will be required in the case of major derailment or line blockage. This train will carry tools, re-railing equipment, demolition and welding equipment, and accommodations for the emergency response personnel. The prime objective of the emergency train is to re-open the main line as quickly as possible. This may require re-railing equipment, or pushing derailed rolling stock to the side, and will most probably require that the right of way be repaired (temporary at first, followed up by permanent repairs).

The emergency train comprises the following: A generator car with two generator sets, a tool car, four (4) containerized crew accommodation units sitting on two (2) flat cars, and additional flat cars for carrying track materials (rail, ties, etc.) re-railing equipment (known as “pipe-layers”), dozers for pushing damaged cars out of the way, and a gondola car for carrying waste. The emergency train will be permanently loaded, in a “ready-to-go” state, to facilitate this the generator car, dozers, and pipe layers will be interconnected to a wayside power source so that, when required, they will be able to start immediately. In total, the emergency train will consist of 10 cars.

5. INSPECTIONS STRATEGY

Inspections of every kind are a daily occurrence on an operating railway, for both infrastructure and rolling stock. These are carried out for the purpose of ensuring operational safety and acquiring observational data that is input into continually updated maintenance plans.

Due to sensitivity of the permafrost to any changes in the local thermal regime that may be introduced by the construction of the railway embankment, inspection and monitoring that is not railway standard may be required, particularly in the early years of the railway’s operation. Based on site specific geotechnical examinations undertaken during detailed design and construction, certain sections of the railway may be equipped with instrumentation to permit the monitoring of ground thermal conditions. If deemed necessary these may be connected directly into the railway’s VHF system so that monitoring is possible from the railway headquarters.

5.1 ROLLING STOCK

Locomotives are subject to daily inspections which are visual inspections of different systems and components with the aim of detecting defects that might be developing in the locomotive. Daily inspections of locomotives are visual inspections of different systems and components with the aim of detecting defects that might be developing in the locomotive. These visual inspections will be performed before the locomotive departs on a train.

Combined daily inspection/servicing of locomotives will comprise the following activities:

- Fuelling;
- Adding sand, if required, to locomotive sand boxes;
- Verification of lubricant levels, and topping-up as required (diesel engine, air compressor, etc.);
- Verification of engine cooling water level and topping-up as required;
- Taking a sample of engine oil for analysis by the oil laboratory;
- Verification of any defect report (if applicable) issued by the train crew;
- Visual inspection of mechanical components such as the running gear (wheel, bogies, brake riggings, traction motor and gear cases), diesel engine, radiators and rotating equipment such as cooling fans, generator/alternator and pumps.);
- Visual inspection of electrical components (multiple unit cables, all external lights, electrical cabinet, meters, fault indicators, monitoring system);
- Engine load test and locomotive brake test;
- Cab and window cleaning; and
- Refilling of cab supplies (drinking water, first aid kit, toilet supplies, etc.).

If minor defects are found during fuelling, the locomotive will be directed to the workshop for maintenance and repair.

A brake test is conducted before every loaded train leaves the Mary River Terminal. Once every three days, the cars in a train consist are visually inspected by a walk-by train inspection on both sides of the train, where defective parts are identified. These could include:

- worn brake shoes,
- broken brake rigging,
- missing springs,
- excessively worn wheels,
- torn brake hoses, etc.

During difficult weather conditions and periods of darkness these inspection can be conducted in the Inspection Shed. Small defects are fixed on the train in-situ, others defects are “tagged” for future repair. If not critical, the wagon will remain in service. Otherwise the wagon is removed from the train for rerouting back to the maintenance workshop for repair.

A key contribution to maintaining reliable operation is to detect faults on rolling stock at an early stage of development. The principal defects which can be monitored and detected during operation of train services are:

- Defective axle bearings (hot axle boxes);
- Out of round wheels; and
- Dragging equipment.

5.2 INFRASTRUCTURE

The railway will operate at a maximum line speed of 60 km/h, as such under Transport Canada's Rules respecting Track Safety (TC E-31) it will require regular inspection with a maximum interval of 2 calendar days. The inspections will be of two types, General Inspections and Component Inspections.

General Inspections

The purpose of the general inspection is to ensure the overall safety of the railway line to support train operations. The Track Foremen doing the track inspection shall:

- Assess the condition of the track;
- Evaluate the maintenance requirements of the track and other railway installations;
- Prepare a written report indicating the results of the inspection (defect locations, etc.);
- Advise the responsible authority of any important deficiencies; and
- Take any necessary protective measures to ensure the safety of the railway operation.

The following additional inspections shall also take place

- Main tracks by the Superintendant Track and Signals - once per week in a vehicle or on foot
- Turnouts by the Track Foreman - once per month
- Main tracks by the Superintendant Track and Signals - once per year on foot

Following every inspection, remediation work will be planned and scheduled to comply with the track standards.

Component Inspections

There are two types of component inspection:

- Detailed periodic inspections are thorough examinations of the condition of different components of the track structure. The assessment will be done on the basis of a sampling of the components in track with extrapolation of the results to the full length of the track structure. The annual work plan for the year after the inspection is based on the results obtained; and

- Safety Inspections are periodic inspections of components of the track structure whose failure would have a direct impact on the safe operation of trains. Due to the critical nature of these components, they will have a higher frequency of inspection than the components examined under the detailed periodic inspections examples of these components are the rail and the turnouts.

The frequency of inspection is determined by the traffic density, the age of the components and the rate at which detectable defects develop into failures. This allows maintenance to be conducted economically and prevents irreversible defects or damage to the track components.

Bridges and culverts will be subject to the following inspections and maintenance:

- Annual inspections of condition and structural integrity
- Thawing of ice-blocked culverts
- Maintenance of scour protection around piers and culvert inverts
- Inspection and adjustment of bridges account subsidence
- Safety inspections after seismic events

Records of inspections and corrective action will be kept by the Railroad Infrastructure Department.

5.3 SIGNALLING AND TELECOM

The telecoms and signalling systems are configured to be self inspecting in that the fail safety of the signalling system will be fulfilled by self-diagnosing, hot reservation (stand-by), and automatic reconfiguration at failure of separate elements. Maintenance activities with diagnostic system shall provide in time message reception regarding system element malfunction (fault and pre-fault status diagnostics) and its operative elimination.

The signalling system corresponds to all requirements of a fail-safe system, especially the following:

- A single failure shall not result in a dangerous status of a system.
- Failure detection shall be fulfilled so quickly that occurrence probability of the second independent failure during this time would not be taken into account.
- In case of failure detection, the system shall transfer into a safe status, i.e. the appropriate signals and objects must go to the protecting status.

6. MAINTENANCE STRATEGY

6.1 ROLLING STOCK

Locomotive Scheduled / On-Condition Maintenance

Scheduled Maintenance is performed on a 90-day schedule. This is composed of a running gear inspection, checking air compressor, cleaning batteries, replacing lubricating oil and fuel filters, examining trucks (bogies), etc. In addition to the 90-day inspection, a 180-day inspection is performed on the locomotive, during which crankcase components are inspected; radiator fan blades and fuel headers are cleaned and inspected. Finally, in addition to the 90-day, 180-day, and 220-day inspections, a 360-day inspection is performed, comprising cleaning of the compressor intercooler, checking the operation alarms and safety devices, inspecting cooling systems, lubricating alternator and radiator fan bearings, and draining and refilling traction motor gear cases, etc.

The objective of these inspections is to ensure that the equipment and elements inspected will provide reliable service until the next inspection, and to ensure that the locomotive is safe for operation. If any of the checks reveal an unsatisfactory condition, then remedial action will be taken to rectify the situation. After the completion of each periodic inspection, a "Cab Card" is filled out indicating when the next periodic inspection must take place.

Locomotive Overhauls

Locomotive overhaul intervals can vary from 5 to 10 years, depending on locomotive utilisation. The appropriate interval will be determined once the locomotive anticipated workload has been assessed.

Two levels of overhaul (minor and major) are performed and alternate between each other. Both consist of the replacement of components by identical components which are new or reconditioned components (i.e.: overhauled components). Major and minor overhauls differ in the components involved. The components are identified in Table 6.1 below.

Table 6-1 Components Replaced During Overhaul

Component	Minor Overhaul	Major Overhaul
Diesel engine	Replace power assemblies only	Replace with an overhauled engine
Main alternator		Replace with an overhauled main alternator
Air compressor		Replace with an overhauled air compressor
Radiators and cooling fans	Replace	Replace
Bogies	Overhaul	Overhaul
Traction motors	Replace with overhauled traction motors – if necessary	Replace with overhauled traction motors – if necessary
Electronics		Replace
Air blowers	Overhaul	Overhaul
Brakes	Seals, gaskets replaced	Replaced with overhauled component
Telecommunications/signalling equipment	Re-qualified (tested)	Replaced and updated
Cab accoutrements	Seals gaskets, etc replaced	Replaced and updated
Frame	Inspected for corrosion, local repairs and touch-up	Straightened, corroded elements replaced
Couplers	Inspected, worn elements replaced	Replaced

During locomotive overhauls, major components are sent to their original equipment manufacturer to be overhauled. They are either replaced by new, spare or overhauled spare components (known as unit exchange).

Ore cars will not subject to scheduled maintenance with the exception of brake testing and the replacement of brake hoses in accordance with domestic laws.

The ore cars are subject to visual inspections twice on every round trip. Once loading is complete at Mary River, and before the train enters the main line, an emergency brake continuity test is performed by the locomotive driver. A slow 'drive by' inspection by the Mary River stationed car mechanic and the locomotive assistant driver is performed to confirm all brakes have applied and subsequently that all brakes have been released. During the unloading process at Steensby Port Yard, a train-crew change takes place. Following unloading a pull-by inspection inspection of the train conducted by a Maintenance facility car mechanic will occur.

Due to the short distance between Steensby Port and Mine and in light of the unit train operation, detailed inspections will not be conducted on a trip basis but rather at mileage intervals that adhere to FRA requirements and current practises in Canada. These inspections require walking around the consist and visually checking for any loose or dragging components,

the condition of the brake shoes, keys, brake linkage, wheels, couplers, brake hoses, truck wear plates and springs.

Repairs are carried out either with the car in situ within the train consist (in the case of minor repairs), or by sending the car to the workshop to perform heavier repairs, and replacing it with a spare car (note: for ore trains, two-unit “tandems” will have to be removed from service)). Brake tests are performed on the train consist in accordance with local operating rules, but usually at the time of attachment of the locomotive to the train consist. Single car brake testing is performed every time a car is sent to the workshop. Where no interim repairs are performed cars are tested annually.

6.2 INFRASTRUCTURE

Day-to-day Maintenance

The day-to-day maintenance works are the most common maintenance work. These activities are required to keep the track and the right-of-way in a good condition on a day to day basis. Day-to-day maintenance activities are scheduled in advance and are organised by the maintenance team in such a way to minimise the disturbance to the railway operations. In general, the planned maintenance work comprises the following:

- Track gauge maintenance;
- Track alignment maintenance;
- Track geometry repairs;
- Snow mobile crossings and refuge repairs;
- Track shoulder maintenance;
- Turnout maintenance;
- Drainage maintenance; and
- Right-of-way housekeeping;

These maintenance activities are performed following a prepared working schedules adapted to the railway traffic and track forces workload.

Programmed Maintenance

Programmed maintenance work is performed on those sections with the highest maintenance priority:

- Lifting, Lining and Tamping work;
- Ballasting work;
- Rail replacement; and

- Rail grinding.

The objective is to maintain track in a safe condition while obtaining the maximum service life from the track components.

These works are be well planned and organized in advance to minimise the disruption to railway operations. In general, a specific track closure period is required to perform these activities. The duration is negotiated with the Transportation Department and may last from 4 to 8 hours. It is not necessary to close the entire railway.

Spot renewal will ensure that the track is always in good condition. Maximum service life will be achieved for each component in the structure.

Major Maintenance

This type of work renews all components of the track at the same time and provides track close to perfect conditions during the early years, but general track structure deterioration sets in with the passage of time. At a certain point of deterioration complete renewal is then required, regardless of the service life that may remain in some of the components.

Under the knowledge that the railway network will be a completely new track infrastructure, a requirement for major maintenance renewal will not be necessary for a number of years, estimated at 10 – 12 years. Therefore, the Engineering and Maintenance Department will be structured around a day-to-day/programmed maintenance procedure during the first decade or so.

Unplanned Maintenance

Unplanned maintenance works is essentially the emerging corrective maintenance work required to restore the track condition to an acceptable level of safety to operate the railway. If the planned maintenance work is rigorously performed and well done, there should be a minimum of unplanned maintenance work required. This category of maintenance is performed in response to the discovery of defects affecting or with the potential of affecting railway serviceability and safety. To restore the track structure to an acceptable level of quality, the maintenance team will perform the repairs on an as required basis. In general, the unplanned maintenance work typically comprises the followings:

- Snow storm clean-up;
- Broken or defective rail repairs;
- Correction of track geometry;
- Right-of-Way collision;
- Wide track gauge repairs;
- Derailment repairs; and
- Repairing damaged snow fencing.

These interventions must be well prepared for in advance by having an additional quantity of track material in stock dedicated for these events

6.3 SIGNALLING AND TELECOM

Maintenance activities shall be based on recommendations of the system suppliers and include procedures related to the condition of the equipment: inspections, preventive and emergency maintenance

Local Maintenance

Local Maintenance will be carried out at three levels:

- Level 1: Inspections: regular checking and adjusting equipment characteristics, including fuelling and checking the diesel generators powering the remote sites,;
- Level 2: Scheduled Preventive Maintenance: schedule maintenance activities and safety operations; and
- Level 3: Corrective Maintenance: on site corrective maintenance, failure detection and removal and replacement of faulty units.

The impact of corrective maintenance on regular train operations will be minimised by utilisation of self-diagnosing systems (identification of the failure) and redundancy for defined sub-system parts according to the system reliability and availability analysis.

Depot Maintenance

Depot maintenance, which will normally be performed at the supplier's facility, is carried out at additional two levels:

- Level 4: Repair of unit replaced; and
- Level 5: Upgrade or reconfiguration activities.

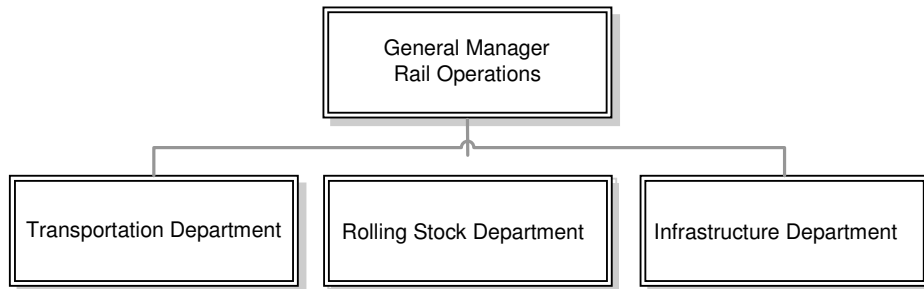
7. ORGANIZATION

The railway organization comprises four functional departments, being:

- General Administration led by the Railway General Manager,
- Transportation Department led by the Superintendant Transportation,
- Rolling Stock Department, led by the Superintendant Rolling Stock, and
- Infrastructure Department led by the Superintendant Track and Signals.

The organisational structure is illustrated in Figure 7.1 below

Figure 7-1 Railway Organizational Structure



7.1 ROLES AND RESPONSIBILITIES

General Administration

The Railway General Manager is responsible for the entire rail operation. He is ultimately responsible for everything from the health and welfare of his staff to the timely delivery of iron ore to Steensby Port stockpiles. Other than the Department Superintendants the administration staff also report directly to him, these are:

- A Secretary provides secretarial services principally to the General Manager and department heads. As the sole secretarial resource available to the railway's organisation, the person fulfilling this function is required to be flexible and organised.
- A Payroll Officer/Contract Administrator is responsible for railway payroll administration and contract negotiations with outside individuals and companies who provide service to the railway. This position also provides Human Resources functions and requires logistical support from the Iron Mine's Head Office.
- A Statistician keeps records of budget, tonnages hauled and rolling stock mileages. The data collected, collated and processed by this individual provides information that will lead to system optimisation and assists in the timely ordering of supplies and the identification of recurring problems.
- A Storekeeper/Procurement Officer manages and orders supplies for the railway stores department. The isolated location of the railway provides for a particular challenge for this role, with the major supplies relying on an annual delivery by sea in the months of August and September; support will be required from the Iron Mine's Head Office.

Transportation Department

The Superintendent of Transportation heads the Transportation Department and is responsible for all the activities associated with the movement of rail cars. This includes the personnel involved with the actual movement of a car such as yard and train crews, documentation

involved in car movement (waybill, train journal, switch list) and finally the coordination of train movements. The principle staff reporting to the Superintendent of Transportation is:

- Operating crews are considered those employees that are engaged in Train and Yard Service and drive the trains. The train crew consists of two employees, a locomotive driver and an assistant locomotive driver.
- Dispatchers and Operations Controllers are the employees who control the movement of trains throughout the railway

This team is also supported by a Train Master/Mechanic and a yard crew at Mary River.

Infrastructure Department

The otherwise referred to as the M.O.W. Department, will provide the required technical and maintenance support for the railway. The department This includes personnel involved in all aspects of the above activities such as, engineers, supervisors, foremen, and labourers.

The Superintendent of Track and Signals leads and manages the Infrastructure Department and is responsible for all activities associated with the day-to-day maintenance and capital replacement of track components, culverts, signalling and telecommunications. The contract officer in the railway's general administration handles contract services for the M.O.W. Department, but contractual employees report directly to the Superintendent of Track and Signals when on site. Four key staff members report directly to the Superintendent of Track and Signals:

- Yard Track Foreman, who is responsible for the day to day inspection and maintenance of the southern end of the railway line with a team of welders, equipment operators and track maintainers who comprise the Yard Track Gang.
- Mine Track Foreman who is responsible for the day to day inspection and maintenance of the northern end of the railway line and the Mine Track Gang
- Telecoms Supervisor, who is responsible for the inspection and maintenance of the entire railway telecommunications system to assure constant functionality of the network and assuring rail operation and safety, and is assisted by telecoms radio specialists and a network administrator, and
- Signal Supervisor, who is responsible for the inspection and maintenance of the entire railway telecommunications system and is assisted by signal technicians and diesel mechanic.

Rolling Stock Department

The Superintendant Rolling Stock is responsible for the rolling Stock Department and supervises all Consolidated Maintenance Facility operations and is responsible for the inspection and maintenance of all rolling stock. He is supported by a team of locomotive

mechanics and electricians and a team of car mechanics. These are in turn supported by a wheel shop mechanic, a millwright and a Fabrication Shop helper.

8. STAFFING AND TRAINING

8.1 SENIOR MANAGEMENT

To the extent possible senior management will be selected based upon prior experience in similar conditions. They will also be required to follow the same safety and induction programs as all line managers.

8.2 RAILWAY, LINE MANAGEMENT

Line management and especially those in Safety Critical Positions will be recruited based on prior experience in similar operating conditions. While the conditions in this railway are somewhat unique, they are similar to operating conditions in Northern Canada, Russia (Trans - Siberian), Scandinavia and Alaska.

Line Managers will have had a minimum of 10 years experience in similar conditions in addition to the technical and/or educational requirements required for the position.

8.3 QUALIFICATION, CERTIFICATION AND TRAINING

Competence

A fundamental safety principle is that employee will be competent to perform safety-related tasks; this includes safety management tasks.

The Railway will ensure competency by:

- Specifying roles and responsibilities including safety responsibilities in job descriptions
- Specifying the competency requirements to discharge these responsibilities.
- Matching people to these job through a process of competence-based selection, including aptitude, knowledge, skills, and experience
- Inducting new employees into the organization
- Training operational employees to perform their duties prior to taking up those duties.
- Providing regular refresher training to ensure that skill levels are maintained for all employee
- Reviewing performance to identify competence gaps and by filling those gaps through the provision of additional training and development.

Induction and Orientation

All new entrants attend an induction program as soon as practicable after starting employment. This covers basic personnel information and general safety issues. The duration of this program depends on the nature of the job and the previous experience of the new entrant.

Line Managers ensure that new entrants and transferees between jobs also receive local job orientation as soon as practicable on arrival and before commencing work. The safety aspects of local job orientation comprise:

- Local fire arrangements and means of escape
- Accident reporting arrangements
- Specific local hazards, and precautions to be taken
- Hazard reporting arrangements
- Rules and Permit- to- work arrangements
- Requirements of the job description and the safety responsibility statement
- Location of sources of relevant safety information
- Safe Method of Work Procedures.

Safety Training

The Railway will develop a Safety Training Plan that will outline 4 categories of training:

- Basic Safety Training
- Professional Safety Training
- Annual Safety Training
- On-site Safety Training

The following Safety Training is required:

- All employees must receive Basic Safety Training.
- All Contractor's staff must receive Basic Safety Training.
- In addition, to ensure the safety of personnel working on or accessing the operational railway, such employees must receive Professional Safety Training appropriate to their respective duties.
- All operations staff must be trained and must complete the required assessment at intervals prescribed by the Company.

Operating Rules Qualifications

All employees working on the operating Railway will be qualified depending on the position they occupy in Railway Operating Rules. The qualifications will be aligned with those currently used

on other Canadian railways. Employees will be trained and must pass an assessment where by a minimum passing grade of 85% must be attained. Employees in safety Critical positions will be retrained and assessed on an annual basis while other classifications will be assessed every 2nd year.

Safety Critical Activities

A Safety Critical Activity is any activity involving train or maintenance operations, construction on or adjacent to the operating railway, traffic monitoring and controlling or passenger transportation that has a direct impact on the safe operation of the railway system or safety of workers.

- Safety Critical Activity in Relation to the Railway
 - Safety Critical Item is that which, if it fails, will or could result in a railway accident.
 - Safety Critical Operation or Process is that which, if carried out incorrectly, or not carried out when it should be, will or could result in a railway accident.
- Safety Critical Activities in Relation to Safety of Workers)
 - Safety Critical Item is that which, if it fails, will or could result in injury or death of workers.
 - Safety Critical Operation or Process is that which, if it is carried out incorrectly, or is not carried out when it should be, will or could result in injury or death of workers.

Safety Critical Positions

Safety Critical Position refers to any staff responsible for carrying out a Safety Critical Activity. These positions include but are not limited to:

- Train Controllers (dispatchers)
- Train Drivers and Track Vehicle Drivers (Operators).
- Train Driver Assistants
- Train Crews
- Works Site Supervisors
- Rolling Stock Staff who are involved in maintain or testing safety critical systems.
- Permanent-way Staff including signalling staff responsible for maintenance or testing of Safety Critical Systems.
- Any other position designated by the railway

Qualifications for a Safety Critical Position

All employees working in a Safety Critical Position are subject to the following:

- They must pass the required physical and mental examinations as prescribed by the Company at the intervals determined by the Company.

- They must receive a Safety Job Function Certification and be regularly retrained and re-assessed
- Employees responsible for Safety Critical Activities must be properly trained and qualified to perform the function.
- Employees in Safety Critical Positions and any other employee designated by the Railway must attend safety-training courses and any other course designated by as required.
- All employees in Safety Critical Positions must be aware of the rules and regulations pertinent to any task that they are undertaking and must be aware and have available a copy of any pertinent rules, regulations or job procedure.
- Prior to commencing their daily duties, any staff in a Safety Critical Position should have their condition assessed by a supervisor and may be subject to mandatory or random alcohol and drug testing.
- Employees in Safety Critical Positions must carry proof of their qualification while on duty.

9. SAFETY AND EMERGENCY RESPONSE

The safety of operations and personnel will be the primary concern of the railway staff at all levels of responsibility. The inspection and preventative maintenance practices described in Sections 5 and 6 of this document and the qualification and training requirements of personnel described in Section 7 are fundamental to the safe operation of the railway. The most fundamental policy with respect to safety is adherence to these practices and policies. The Railway Safety Management Plan is a formal tool to inform employees of safety requirements, to measure performance against these requirements and to and further improve safety performance

9.1 SAFETY MANAGEMENT PLAN/SYSTEM

The Safety management system will include:

- the railway company safety policy
- annual safety performance targets
- the associated safety initiatives to achieve the targets
- a clear definition of the authorities, responsibilities and accountabilities for safety at all levels in the railway company;
- a system for involving employees in the development and implementation of the safety management system;

- systems for identifying applicable railway safety regulations, rules, standards and orders, and the procedures for demonstrating compliance with them
- a process for identifying safety issues and concerns
- a process for evaluating and classifying risks by means of a risk assessment;
- risk control strategies;
- systems for accident and incident reporting, investigation, analysis and corrective action; and
- systems for ensuring that any person with access to railway property, have appropriate skills and training and adequate supervision to ensure that they comply with all safety requirements.

PERFORMANCE INDICATORS AND THRESHOLDS

Performance indicators and thresholds will be determined through:

- procedures for the collection and analysis of data for assessing the safety performance of the railway company;
- procedures for periodic internal safety audits; reviews by management; monitoring and evaluations of the safety management system, and
- systems for monitoring management-approved corrective

MONITORING AND REPORTING REQUIREMENTS

The railway shall maintain records for the purpose of assessing its safety performance. These records shall contain the following information:

- accident and incident investigation reports and a description of the corrective actions taken for accidents and incidents that meet the reporting criteria; and accident rates expressed as follows:
 - employee deaths, disabling injuries and minor injuries, per 200,000 hours worked by the employees of the railway company, and
 - train and grade crossing accidents that meet the reporting criteria, per million train miles.

9.2 EMERGENCY RESPONSE PLAN

An emergency response plan has been developed for the railway that addresses the procedures to be followed in the event of a train accident or derailment. The procedures identify the medical services that should be contacted in the event of injuries, the first aid responses that should be executed at the site of the accident, and the modes of transportation that should be used for injured persons depending upon the location of the accident and ambient conditions. The plan also identifies the company personnel and government departments that require advisories of an accident/incident.

The Emergency Response Plan also identifies the type and location of emergency equipment and the procedures to be followed in the event of a derailment, including check lists and accident reports. The plan also covers the specific requirements for response to an event that includes a fuel spill, and the procedures that are to be applied following a seismic event.

9.3 ADAPTIVE STRATEGIES

Baffinland is committed to continuous improvement in its work activities with the aim of reducing risks to the environment and improving operational effectiveness. The strategy at Baffinland is regular monitoring supported by operational change and adoption of other mitigation measures as warranted.

As per the requirements of Baffinland's EHS Management Framework (SD-STD-001), the company will conduct and document regular management reviews of its Railway Management Plan. Such reviews will ensure integration of monitoring results with other aspects of the Project and ensure that necessary adjustments are implemented as required. These reviews also provide a formal mechanism to assess management effectiveness in achieving company objectives and maintaining ongoing compliance with Project permits and authorizations.