APPENDIX 10D-9.2

RAILWAY EMERGENCY RESPONSE PLAN

MARY RIVER PROJECT

Railway Emergency Plan

Document No.: 11030-RP-OP-2000-001

Rev. 0

Rev.	Date	Revision(s)	Prepared By	Reviewed By	Submitted By	Approved By
			Document No. 11030-RP-OP-2000-001			**Rev. 5**

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1. PROCEDURE – TRAIN ACCIDENT OR DERAILMENT

When a train accident or derailment occurs, it is very important to first check if there are injuries and to know their severity. If there are any injured people the arrangements necessary to provide required medical care and transportation should be taken immediately (see Procedure – Sections 1.1 and 1.2).

People at the scene or those closest to the scene of the accident should assist the wounded as quickly as possible and the procedures required by the nature of the accident be implemented.

Derailment on the main track or siding must be reported immediately to the Dispatcher, the Superintendent Transportation, the Railway General Manager and Superintendent Track & Signalling. The Superintendent Transportation should then call the Nunavut Ministry of Economic Development and Transportation at the following number: 1-867-975-7800.

The Dispatcher shall notify other relevant people if the severity of the accident requires it (see Section 1.3).

In every case, the coordination of activities shall be provided immediately, and the respective superintendants and teams take the appropriate decisions and ensure the efficient course of operations.

The coordination site for accidents, derailments or other, is the Steensby Consolidated Maintenance Facility. All measures are to be put in place to operate as efficiently as possible.

1.1 MEDICAL SERVICES

If an injured person requires medical attention, the medical services concerned should be called and the doctor should be notified of the situation according to the information received from the First Aid Attendant (FAA) at the scene.

- Health Center of Steensby and/or Mary River health center (phone number to be added)
- Air Ambulance (phone number to be added)
- Baffin Regional Hospital; Phone: (867) 979-7300

1.2 ACCIDENT: INTERVENTION AND INJURED TRANSPORTATION

Once an accident occurs, the DISPATCHER must be notified. The DISPATCHER acts as coordinator of communications between various parties (e.g. air ambulance, hospitals, pilot, etc.). If an FAA or relief is not immediately available for transport to the accident site the

DISPATCHER will take the necessary steps to mobilize a suitable replacement person that is likely to arrive at the accident site as soon as possible.

In an emergency intervention followed by an accident, it is very important that members of the various teams observe radio silence to give priority to communications of the DISPATCHERS, FAA, and PILOTS.

1.2.1 Response Actions for First Aid

In the absence of a doctor and/or a nurse at the accident site, a first aid responder will be chosen among the available employees in the following order:

- A First Aid Attendant (FAA)
- A qualified first aider
- A person with knowledge of first aid
- Anyone available

The responsibility for the care of the injured will be transferred to a more skilled reponder as soon as they arrive. The first responder will inform the newly arrived and more qualified responder of all the details they have about the accident, injury and condition of the injured. It is preferable if at all possible that an employee other than the doctor, nurse or first aid responder operate the emergency vehicle.

To inform all concerned of the location of qualified FAA employees, a list of their names and place of their assignment will be updated, distributed and displayed monthly at appropriate locations.

1.2.2 Transport

In case of emergency during the daytime, the helicopter will be used to transport a badly injured person to Steensby and/or Mary River health centre. At night, or during periods of bad weather, the rail-bound maintenance vehicle stationed at either Steensby or Mary River will be used as an Emergency Vehicle.

Transportation

Helicopter

If the service of a helicopter-ambulance is required, the following persons will be contacted in order of priority.

- Railway General Manager
- Pilot

When available a helicopter ambulance that can rapidly mobilize a seriously injured employee will be used. A stretcher is available at all times to be loaded on the helicopter.

To facilitate communications in case of an emergency, the pilot reports his position to the dispatcher every time he lands his helicopter.

A portable radio with battery charger is placed inside the helicopter so that the pilot will be constantly listening on a specified channel when not flying. In addition the pilot wears a pager when he is off duty.

Emergency Vehicle

There will not be a dedicated emergency vehicle; however the preferred method of transporting injured persons when the helicopter is not available will be one of the two Rail-bound Maintenance Vehicles (one vehicle is based on at Steensby, the other is based at Mary River) due to their high speed, stability, large cab and emergency backup generator.

In the case of an emergency where the helicopter is not available, the Dispatcher will determine which of the two Rail-bound Maintenance Vehicles to send to the scene of the emergency. This decision will be based on the relative location of the vehicles to the emergency site, and the availability and/or suitability of the two airports to airlift the injured party, relative to the emergency site (i.e. is one of the two airports closer to the accident site, or is one of the two airports closed due to the inclement weather conditions).

The dispatcher will also decide how the stretcher, emergency equipment, and FAA will be transported to the site of the accident (either by the Rail-bound Maintenance Vehicle itself if it is at its home base or by another hi-rail vehicle or locomotive).

Medical equipment will be checked by the FAA, and general equipment by the designated inspector at the frequency prescribed. The inspection records must be posted in the Steensby Consolidated Maintenance Facility.

For medical reasons, the health worker may, even if the helicopter is available, request the use of the emergency vehicle. They will report to the DISPATCHER who will trigger the process of availability of the emergency vehicle.

Other Vehicles

Depending on the location of the accident, its severity, the weather conditions, etc. other vehicles can be used such as hi-rail vehicles, locomotive alone or with appropriate as available units, etc.

THE DISPATCHER IN DUTY WILL GIVE THE PRIORITY ON THE TRACK TO ANY VEHICLE THAT MOVES IN SUCH AN EMERGENCY

The person who will operate the hi-rail vehicle will be chosen according to availability, in the following order:

- A qualified operator who is not the doctor, nurse or first aid responder;
- If several employees are available one will be selected in the following order:
  - A qualified camp maintenance worker
  - A skilled operator
  - A qualified employee
- If no qualified on shift employee is available: A qualified member of off shift staff will be mobilised.

In any situation, the safety of the patient justifies the decisions taken in connection with their transport.

Unless a replacement justified by fatigue, qualification or any other important reason, people who were originally in charge of the vehicle and the injured will remain unchanged for the duration of the journey.

1.3 PERSONNEL INFORMED BY THE DISPATCHER (OR DESIGNATED PERSON)

FUNCTION	CODE	TIME
Operations Coordinator		
Superintendent Transportation		
General Manager		
Superintendent Track & Signals		
Superintendent Rolling Stock		
Section Track Foremen		
Telecom Supervisor		
Baffinland Health and Security		
Nunavut Department of Economic Development and Transportation		
CSST		

1.4 NOTICE TO THE CSST, MEDIA AND MINISTRY OF TRANSPORTATION

In any accident, spill or derailment, the Dispatcher or the Railway General Manager or the Superintendent Track and Signals or Superintendent Transport must notify the Baffinland person responsible for Communications and Public Relations, the Director General of Health Security, the Senior Coordinator Health and Safety, the CSST, the Department of Transportation.

The Baffinland General Manager – Health and Work Safety should be notified as soon as possible even if there are no injuries.

1.5 DERAILMENT PROCEDURE

The following applies only when a derailment requires teams working 12 hour shifts on the main track:

- For security reasons a helicopter will be assigned to the site of the derailment during the day;
- A rail-bound maintenance vehicle will be assigned to the site of the derailment or to the closest siding;
- A First Aid Attendant (FAA) wearing a bib identified FAA will be assigned on each shift, they will be equipped with a portable radio and work on the site. The use of the FAA during re-railing equipment will also apply;
- The transportation of employees between the site and the terminals will be done primarily by a Rail-bound Maintenance Vehicle. In an emergency, this vehicle will be dedicated to transport personnel to and from the accident site. However, depending on the circumstances of the derailment, transportation can be made also by a hi-rail vehicle or helicopter;
- The first team for mechanical maintenance will be transported by helicopter or another available transportation mean such as the rail-bound maintenance vehicle to the derailment site. This team will begin clearing the track;
- An emergency train will then depart from Steensby for the derailment site (the makeup of this train is described later in this document). On this train are 4 crew accommodation units for the housing of 8 workers and 1 foreman. These units will be used on the site of the derailment for the following purposes: rest, hygiene and clothes drying;
- A monthly review of the necessary equipment for handling a derailment will be made;
- After each intervention for a major derailment a committee will analyze the progress and recommend the appropriate corrective actions if necessary;
- One (1) locomotive mechanic, one (1) locomotive electrician (1) car mechanic will be aincluded on each team;

- For track maintenance the following employees shall be available for both 12 hour shifts:
  - 2 equipment operators
  - 1 track maintainer
  - 1 MOW equipment mechanic
- Section teams; Steensby track maintenance personnel will be mobilised first, followed by Mary River personnel. If there is a need for additional labour the company will bring in off-cycle employees.

1.6 ITEMS TO CHECK DURING A DERAILMENT

Before working on the site a security meeting will be held. The following topics shall be addressed:

- Procedures to be followed during manoeuvres;
- Radio frequencies used;
- Role and responsibility of each (those responsible will be already identified);
- Expedited site visit to assess the extent of work required to re-establish the service, take pictures to determine the derailment possible cause (broken rail, axle, etc.).The representatives of track maintenance, railway operations and mechanical maintenance should be present;
- Accompanying the emergency train there will be 2 D6T Dozers and 2 pipe layers, if necessary the dozers will push or winch derailed equipment out of the way and pipe layers will be used to re-rail locomotives and wagons;
- Advise the company executives and ensure that the CSST, the Ministry of Transport of Nunavut , and the Ministry of Environment were informed if hazardous or polluting contents are involved in the derailment (see procedure in case of spill of hazardous goods – Section 2);
- In addition to the track maintenance foreman who is responsible for the coordination of track repairs, the railway operations coordinator will ensure that someone is available on each shift to plan all train movements with the dispatcher, to inform him on the progress of the work and coordinate the team change to meet the maximum working hours on the site (12 hours);
- Arrangements must be made with the manager of the Steensby and/or Mary River accommodations to organize catering for a food service to the accident site and to provide a kitchen employee for the kitchen of the emergency train (on 12 hour shifts);
- In the winter, prepare empty ballast wagons as soon as possible and wait until just before the departure time to load them;
- Advise the rolling stock maintenance team to prepare the surfacing machine;

- If necessary establish a security perimeter around the work area with appropriate ribbons visibly coloured.

1.7 ACCIDENT REPORT TO BE COMPLETED BY THE DISPATCHER

The Dispatcher will report the accident using the following form:

TYPE OF ACCIDENT AND BRIEF DESCRIPTION:

ACCIDENT REPORTED AT: ----------TIME DATE: ----------

TEMPERATURE: ----------

WEATHER CONDITIONS TO USE A HELICOPTER: YES ☐ NO ☐

ACCIDENT REPORTED BY WHOM: ---------- TO: ----------

TRAIN NUMBER: ---------- LOCOS NUMBER: ----------

NUMBER OF CARS: ---------- LOCO MECHANIC: ----------

CONDUCTOR: ---------- TRAINMAN: ----------

EXACT LOCATION OF ACCIDENT: ----------

NUMBER OF INJURED (IF APPLICABLE):----------

THEIR CONDITIONS:

DESCRIPTION OF DAMAGES

LOCOMOTIVES:

CARS:

TRACK CONDITION (AND SWITCHES IF APPLICABLE):

CONDITION OF, SIGNALS AND COMMUNICATIONS:

OBSTRUCTED TRACK

MAIN TRACK:

FROM: (DATE) ---------- (HOUR) ----------

TO: (DATE) ---------- (HOUR) ----------

SIDING:

FROM: (DATE) ---------- (HOUR) ----------

TO: (DATE) ---------- (HOUR) ----------

RELEASED TRACK

MAIN TRACK: (DATE) ---------- (HOUR) ----------

SIDING: (DATE) ---------- (HOUR) ----------

TRACK REBUILD (READY FOR SLOW ORDERED OPERATION)

MAIN TRACK: (DATE) ---------- (HOUR) ----------

SIDING: (DATE) ---------- (HOUR) ----------

TRACK READY FOR NORMAL OPERATION

MAIN TRACK: (DATE) ---------- (HOUR) ----------

SIDING: (DATE) ---------- (HOUR) ----------

A) EMERGENCY TRAIN – STEENSBY YARD

Train composition breakdown:

- Power Generator Car
- 4 Crew Accommodation Units mounted on two 89’ flat cars
- 2 Dormitory Units for 4 men each
- 1 Foreman/Recreation Unit for 1 foreman
- 1 Kitchen/Dining Unit

- 1 Depressed flat car loaded with 2 CAT D6T dozers (or similar)
- 2 depressed flat cars loaded with 1 (each) of Volvo PL4608 pipe layers for re-railing (or similar)
- Tool car (equipped with portable re-railing equipment)
- Three 89' flat cars loaded with track materials
- 1 mill gondola with removable ends for scrap materials

1. A foreman of the workshop advised at: ----------Time
2. Train crews called in emergency at: ----------Time
3. Mechanic crews on duty

   Loco mechanic reported at: ----------Time

   Conductor reported at: ----------Time
4. Railways operations foreman reported on duty at : ----------Time
5. Emergency train ready and parked on the main track

   For supply: ----------Time
6. Emergency train stocked and ready to go at: ----------Time
7. Departure from (.....) of the emergency train at: ----------Time
8. Arrival of the emergency train to the scene of the accident at: ----------Time

VARIOUS DELAYS INCURRED PRIOR TO DEPARTURE FROM Steensby

VARIOUS DELAYS INCURRED IN TRANSIT

C) STATUS OF TRAINS AT THE TIME OF THE ACCIDENT

TRAIN NUMBER	LOCOS	WAGONS	LOCATION
----------	----------	----------	----------
----------	----------	----------	----------
----------	----------	----------	----------
----------	----------	----------	----------

D) DELAYS INCURRED BY TRAINS FOLLOWING THE ACCIDENT

TRAIN NUMBER	LOCOS	WAGONS	LOCATION
----------	----------	----------	----------
----------	----------	----------	----------
----------	----------	----------	----------
----------	----------	----------	----------

E) BACKLOG MARY RIVER

FROM :(DATE) ---------- (TIME) ------- TO (DATE) ---------- (TIME)

NUMBER OF TONS STACKED: ----------

2. SPILL OF HAZARDOUS MATERIAL

The Superintendent Transportation is responsible to establish and implement the Emergency Intervention Team. The team will comprise site employees who receive special training to assist in an emergency.

In case of aspill of hazardous material caused by a derailment or another accident, the following procedure should be followed.

To minimize the impact of a spill, it is very important to intervene as soon as possible.

The following steps must be taken to prioritize the events in a logical and effective way:

During an accident or the discovery of a hazardous material spill, the dispatcher is informed by the team or employee who noticed the event.

If the amount of petroleum products (oil, diesel, gasoline, etc.) spilled is less than 100 litres (22 gallons) and is not a threat to a water body, the following intervention plan should not be launched. The spill should be immediately contained and cleaned in the field as soon as possible.

However, if the oil spill involves more than 100 litres (22 gallons) or if it is located near a watercourse, the following procedure should be applied.

Note that for any amount of hazardous materials other than petroleum products, the intervention plan must be initiated immediately.

Immediately the dispatcher takes action and notifies the Lead of the Environment Intervention Team (EIT) and the following:

- Operations Coordinator
- Railway General Manager
- Superintendent Track & Signalling
- Superintendant Transportation
- Telecom Supervisor

The dispatcher shall ensure that someone on the scene maintains or establishes communications with the site on a continuous basis and obtains and transmits the following information to the lead of EIT as soon as possible:

- The exact location;
- Type of spill;
- Approximate quantity spilled;
- Extent of the spill;
- Distance between the track and the spill;
- Approximate distance between the track and the closest water body.

The team on site must not leave the site until the person designated for the first response arrives. This is important in order to measure, collect and submit the required information.

If the spill was caused in a derailment, the dispatcher must also activate the derailment procedure simultaneously.

The lead of EIT should immediately contact the following people:

a) Responsible for the preliminary intervention:

- Steensby Track foreman
- Or
- Mary River Track foreman
- The main purpose of the preliminary procedure is to send someone quickly to the spill location with a mini-kit to try to control the extent of the product

b) If the spill occurs during daylight hours, the head of the EIT must obtain a helicopter as soon as possible. The contact persons are:
   - Helicopter Pilot (location to be specified)
   - It is essential to notify the pilot that equipment will be required to carry the mini-kit to the site of the spill
   - Where it is impossible to fly a helicopter, it is necessary to organize transport with rail-bound maintenance vehicle or hi-rail vehicle as soon as possible
   - The person responsible of the preliminary intervention will organize the support

c) The lead of the EIT team will contact the Superintendent Track and Signalling, the Dispatcher and the Operations Coordinator to prepare a work train for a secondary intervention;

d) The pertinent environmental authorities are:
   – Baffinland Director - Environmental Protection
   – Nunavut Department of Environment
   – Environment Canada Emergency – Environment Canada
   – Department of Natural Resources – (if oil spills greater than 100 litres)

e) Notify the Telecommunications supervisor who needs to ensure or re-establish ongoing communications on the site;

f) The person responsible for public relations should be informed of the spill by providing him the most accurate information;

g) The Lead of EIT will inform a representative of the Ministry of Transportation:
   – Head of Department - Nunavut Depart of Economic Development and Transportation
   – Nominated Engineer – Nunavut Department of Economics Development and Transportation

h) If the spill involves hazardous materials used to produce explosives, it will also inform:
   – Mine site purchasing office

   Dispatcher should immediately call the train crew to prepare the cars needed to load equipment and materials required for secondary intervention.

The Superintendant of Track and Signalling should establish contact rapidly with the port and/or mine management to get a crane excavator and a vacuum truck to the spill site as soon as possible and ensure they are loaded on appropriate wagons.

A mini-kit for the preliminary intervention is available in the following locations: The Railway Maintenance Building at Steensby plus Mary River.

The contents of a mini-kit are: (The mini kit comprises 2 boxes)

FIRST BOX:

1 case 42" x 30" x 29 1/2" (55 lbs)

2 absorbent airbags

1 absorbent roll 10"

25 absorbent sheets 18" x 18"

8 absorbent flanges 48"

1 absorbent flange 5" x 10’

1 neoprene cover

10 bags 6 mil

3 bags of 7 litres "Quatrex sorb" peat moss

2 strong polyethylene sheets 20’ x 20’

2 pairs of gloves Solvex

2 disposable pieces of clothing in Tyvek

2 pairs of security glasses

SECOND BOX:

1 case 42" x 30" x 29 1/2" (55 lbs)

8 absorbent flanges 5" x 10’

100 absorbent sheets (17" x 19" x 3/8")

For the secondary intervention, containers are provided with materials and necessary control equipment. In case of a spill, they are loaded onto a flat car ready to add to a work or emergency train. The following table presents such equipment and material:

RECOVERY SYSTEM (System 3-10 Plus-M)	
Alapha Skimmer 1.5" in stainless steel	Portable base on wheel with handles
10’ of suction pipe not floating	Coalescing separator 10 GPM (35 gal.)
2 x 30’ of pipe 1.5" floating	Retention float Mini Boom
3 x 25’ of pipe 1.5" pump waste disposal	Manual Beta skimmer
1 x 25’ of pipe 1.5" separator waste disposal	2 driving belts
9 fast connectors	3 pump replacing bases H-100
Gasoline outboard motor Honda 5 hp	4 sealing rings for the cover
Pump model H-100 (12 GPM) 250’	

VARIOUS MATERIAL		
1 generator	Mountable pool of 1000 gal.	20 empty barrels with lid
Motor 4.5 hp	Boat 14’	1 box of rags
Train set and fastenings	2 pairs of boots & overalls	1 first aid kit
4 life jackets	4 waterproof piece of clothing	1 bottle for the eyes
Rope and anchor for boats	2 pairs of boots 18"	Hand soap
5 plastic containers 20L	1 box of motor oil	1 tool chest
3 gasoline containers 20 L	1 roll of rope 1/2" x 1000’	2 quencher ABC 20 lbs
Axes, shovels, picks and rakes	5 anchors for piers	2 "radar light" lamps
Roll of garbage bags	3 life belt for piers	2 tents
1 net for helicopter 12’ x 12’	Electrical cables	2 tanks (250 gal.)
Tie to lift barrels	Blue canvass, polyethylene, etc.	1 ice auger
Lighting tower	Heating	Wajax pump & piping
200’ pier 18" with sectional rectangular flotation 25"	1 mechanical saw with blade and chains	

The Railway General Manager or an advisor in environmental protection will fill in the form "Spill Notice" and send it to the concerned in Nunavut Department of Environment, Environment Canada and Ministry of Natural Resources.

Portable radios and if possible, a satellite phone must be brought in to the site of the spill during the preliminary intervention.

When the work train or emergency train arrives at the spill site, the EIT responsible for the response will lead the work. Before starting, it is very important to hold a security and information meeting with all the staff in order to work safely. The discussions will focus on the necessary protective equipment, as well as planned machine manoeuvres.

A video of the track, filmed in the spring, and showing all the lakes, rivers, bridges, culverts, buildings, etc. will serve if needed to target the exact spill location and plan the secondary intervention. DVDs are available in the office of Superintendent Track and Signals and of the Dispatcher.

The Dispatcher will give priority on the track to the rail-bound maintenance vehicle or hi-rail vehicle used for the preliminary intervention and later to the work train or emergency train assigned to the secondary intervention. To minimize damages, appropriate working time will be given to the concerned teams.

Note that for the recovery of contaminated soil, assigned containers are available in Steensby yard.

3. PROCEDURE IN CASE OF EARTHQUAKE

3.1 MAGNITUDE AND EPICENTER UNKNOWN

As soon as a dispatcher becomes aware that an earthquake has or may have hit the railway, they must check with the Operations Coordinator, Superintendent Transportation, Superintendent Ttrack and Signals and Telecoms Supervisor to confirm whether the shake has been detected. Traffic must be stopped within 100 miles of where the earthquake was felt.

Traffic will be resumed under certain conditions, when the magnitude and the epicentre is determined. This information can be found on the following website:

http://earthquakescanada.nrcan.gc.ca/index-eng.php

Note that this information takes approximately one hour to register on the internet.

3.2 MAGNITUDE AND EPICENTER KNOWN

Trains may re-start operations based on the following criteria:

3.2.1 Earthquake lower than 5.0 (Richter scale)

Restore normal operating speeds. Notify the Supervisor of Track and Signals who will assess the need to make an inspection.

3.2.2 Earthquake between 5.0 and 5.9 (Richter scale)

Within 100 miles (160 km) from the epicentre, the following risk areas will be checked in order to allow the circulation of trains:

- Tunnels
- Bridges
- Rock cuts
- Retaining walls

In areas within 80 km (50 miles) from the epicentre all locos and all trains can be allowed to move at restricted speed, until the inspections are made and appropriate speeds are established by Superintendent of Track and Signals. Beyond 80 km from the epicentre, the normal speed can be restored.

3.2.3 Earthquake of 6.0 (Richter scale) and more

The operation of all the locos and trains within 100 miles (160 km) from the epicentre should be discontinued. It should not be reinstated before the inspection of the area involved and the establishment of appropriate speed limits by those responsible for track maintenance.

All locomotives and trains located beyond a radius of 100 miles (160 km) from the epicentre can move at restricted speed, after verification of the risk areas listed in 3.2.2. Following the inspections, speed limits throughout the territory will be determined by Superintendent Track and Signals.