EMERGENCY MANAGEMENT PROGRAM

Manual 2
Emergency Response Plan

Updated November 2014

Table of Contents

1.0 Emergency Response Roles and Responsibilities

1.1 Emergency Command Group (ECG) Chair

Position: EMERGENCY COMMAND GROUP (ECG) CHAIR

Role:

- Manages the mine site's overall emergency
- Ensure Emergency Command Centre (ECC) is staffed and functioning at levels needed to respond adequately
- Notify Corporate Crisis Response Team
- Oversees the development and implementation of the Emergency Management Plan
- Approves overall strategy, control and emergency response activities and operations
- Approve release of all information and serve as media spokesperson if required
- Determine when emergency response operations are to be de-activated and terminate
- Work closely with the Corporate Crisis Operations Centre Chair

Activities:	Tasks
ASSESS	☐ Information to determine call out of specific Emergency Response Team members ☐ Response strategy and priorities ☐ Deployment of: • Special Emergency Response Team • Surface Emergency Response Team / Mine Rescue Team • Critical Incident Management procedures ☐ Business impacts ☐ Response options ☐ Immediate priorities for addressing the crisis ☐ Requests for additional resources ☐ Meetings and briefings frequency on incidents/crisis from Corporate Crisis Response Team and mine site Emergency Operations Centre ☐ Communication requirements with Corporate Crisis Response Team
IMPLEMENT	☐ Notify, Co-ordinate and communicate with Corporate Crisis Response Team Chair ☐ Calls meetings of emergency management team on a set defined frequency, determines its composition and appoints additional resources as necessary ☐ Briefs other members of Emergency Response Team and the Corporate Crisis Response Team as necessary. ☐ Lead meetings of the ECG to: ☐ Evaluate the extent of the Emergency ☐ Confirm composition of the ECG and appoint additional resources as necessary ☐ Ensure ECG is being effectively implemented ☐ Determine any further action to be taken and priorities
MONITOR	☐ Response activities, options and priorities ☐ Emergency status and impacts ☐ Activates and Deactivates Emergency Command Centre and personnel

1.2 Emergency Command Group (ECG) Coordinator

Position: EMERGENCY COMMAND GROUP COORDINATOR

Role:

- Responsible for monitoring the response activities and recommending modification of the plans accordingly, in consultation with the ECG Chair
- Coordinate the overall response effort in consultation with the Corporate Crisis Coordinator
- As required, Co-ordinate with the Mine Coordinator and the Surface Coordinator to mobilize the Mine Rescue Team and/or Surface Emergency Response Team
- Provide support and expertise to the Emergency Response Team members
- Monitor all Emergency Response Team members staff to ensure shift changes take place as required
- Ensure Emergency Command Centre status boards and information displays are kept current
- Ensure all ECG Team staff maintain written records of their activities
- Assume Emergency Chair position as required

Activities:	Tasks:
ASSESS	☐ Emergency level as per Appendix 3 ☐ Strategy and priorities ☐ Emergency Command Centre Staffing levels
IMPLEMENT	☐ Contact and co-ordinate with Corporate Crisis Coordinator ☐ Ensure that the ECG Chair has notified Corporate Crisis Chair of the emergency ☐ Keeps the Chair closely apprised of all developments and information ☐ Develops the overall crisis management strategy for ECG Chair approval ☐ Respond to the emergency incident under the direction from the Chair ☐ Act as a focal point for all information ☐ Assemble Emergency Command Group ☐ Activate Mine Rescue Team and/or Surface Emergency Response Team as required ☐ Oversee community relations ☐ Assist with media briefings as required ☐ Ensure Emergency Command Centre staffed and equipment maintained
MONITOR	☐ Communications ☐ Strategy and priorities ☐ Effectiveness of strategies and response activities ☐ Effectiveness of each team member and respond accordingly

1.3 Communications Coordinator

Position:	**COMMUNICATIONS COORDINATOR**
Role:	• Responsible for developing and distributing all company communications within and external to the organization at a local level • Co-ordinate with the Corporate Crisis Communications personnel.

Activities:	**Tasks:**
ASSESS	□ Contact first the Corporate Communications Coordinator □ Media and stakeholder communication requirements □ Applicability of Media Communications Plan guidance in Emergency Communications Plan
IMPLEMENT	□ Co-ordinate with Corporate Communications Coordinator □ Inform Key Stakeholders □ Complete media log sheets □ Responsible for identifying, notifying and liaison with local and regional authorities □ Responsible for co-ordinating communications with employees and families
MONITOR	□ Assign personnel to secure access to all outside telephones and log all calls in and out by time □ Instruct personnel to make no unauthorized statements to anyone □ Assign personnel to take signed statements of employees involved in emergency □ Responsible for assisting the Chair with the development of the communications plan. □ Identify internal and external resources to assist the company in monitoring and handling it's response to inquiries by the media and other key corporate stakeholders. □ Establish communications and waiting area for family members if required. □ Notify appropriate external agencies of emergency situation □ Arrange for the provision of food and support for all employees involved in the rescue and recovery efforts □ Instructs corporate office reception and employees to forward all media calls to corporate spokesperson □ Ensures worldwide or regional media and internet monitoring services are in place and activated as required and monitors general inquiry message box and e-mail for inquiries. □ Drafts preliminary stand-by statements, news releases and other materials for approval of the ECG Chair □ Develops crisis communications strategy and delivers approved statements, core messages and other information to the media, employees and other key stakeholders on the company's behalf. □ Briefs and prepares spokesperson(s) for media interviews. □ Analyzes and immediately forwards all news items to Emergency Command Group as they become available.

1.4 Mine Coordinator

Position: MINE COORDINATOR

Role:

- Implements emergency response plan and protocols underground
- Co-ordinates the Mine Rescue Team
- Oversees evacuation of underground workings
- Ensures the tag board is operated and current
- Co-ordinate with Corporate Crisis Engineering Support

Activities:	Tasks:
ASSESS	☐ Further action to be taken in order of priority ☐ External support requirements ☐ Strategy ☐ Damage estimate ☐ Repair and recovery priorities ☐ Ensure that the activities required by the Emergency Response Plan are safe for the responders to carry out
IMPLEMENT	☐ Co-ordinate with Corporate Crisis Engineering Support ☐ Co-ordinate evacuation procedures as required ☐ Assign personnel to operate the tag board ☐ Conduct head count to ensure all employees are physically accounted for ☐ Instruct and co-ordinate Mine Rescue Team ☐ Contact external support resources as appropriate ☐ Collect information for damage estimate and repair priorities ☐ Report to ECG Coordinator
MONITOR	☐ Appoint duties as required to available personnel to assist in underground response ☐ Co-ordinate repair solutions ☐ Collect information from the field and verify the actions required to correct facility failures ☐ Ensure that required infrastructure is adequate ☐ Monitor emergency progress ☐ Co-ordinate with the Health and Safety Coordinator to ensure the continued safety of response personnel

1.5 Surface Coordinator

Position: SURFACE COORINATOR

Role:

- Implements emergency response plan and protocols on surface
- Co-ordinates the Surface Emergency Response Team
- Oversees evacuation of all buildings and facilities on surface as required
- Co-ordinate with Corporate Crisis Engineering Support

Activities:	Tasks:
ASSESS	Further action to be taken in order of priority External support requirements Strategy Damage estimate Repair and recovery priorities Ensure that the activities required by the Emergency Response Plan are safe for the responders to carry out
IMPLEMENT	Co-ordinate with Corporate Crisis Engineering Support Co-ordinate evacuation procedures as required Conduct head count to ensure all employees are physically accounted for Instruct and co-ordinate Surface Emergency Response Team Contact external support resources as appropriate Collect information for damage estimate and repair priorities Report to ECG Coordinator
MONITOR	Appoint duties as required to available personnel to assist in surface response Co-ordinate repair solutions Collect information from the field and verify the actions required to correct facility failures Ensure that required infrastructure is adequate Monitor emergency progress Co-ordinate with the Health and Safety Coordinator to ensure the continued safety of response personnel

1.6 Environmental Coordinator

Position: ENVIRONMENTAL COORDINATOR

Role:

- Coordinates with ECG Chair
- Coordinates with Corporate Crisis Environmental Support
- Coordinates with Communications Coordinator to ensure all stakeholders and officials are notified and kept informed

Activities:	Tasks:
ASSESS	Status of environmental damage from incident Status of environmental impact from response activities External support requirements
IMPLEMENT	Provides systems and procedures necessary to ensure on-going assessment of potential and actual environmental impacts Chronologically document all actions, decisions, contacts and requests Collects information and communicates it to the Corporate Crisis Environmental Support Communicate requirements to Corporate Crisis Response Team and Mine Site Emergency Command Centre personnel to follow the appropriate safe-work procedures Communicates potential and actual environmental impact information to the Communications Coordinator for inclusion in media statements as required
MONITOR	Crisis status and impacts Studies and assesses environmental impacts as required

1.7 Health and Safety Coordinator

Position: HEALTH AND SAFETY COORDINATOR

Role:

- Coordinate with the Corporate Crisis Health and Safety Coordinator
- Has the authority to stop and/or prevent unsafe acts during emergency operations
- Identify hazardous situations and safety procedures associated with the emergency
- Initiate and oversee incident investigations
- Review medical support and Critical Incident Stress management services
- Ensures that the emergency response and repairs are conducted in compliance with company policies and applicable regulatory safety requirements.

Activities:	Tasks:
ASSESS	Status of personnel (employees, contractors, visitors) Training and proper equipment for the emergency response hazards and risks Safety and Health Risk of impacted persons Safety and Health Risk of responders
IMPLEMENT	Provides systems and procedures necessary for coordination of safety efforts, and measures to promote emergency response safety, as well as general safety of incident operations. Chronologically document all actions, decisions, contacts and requests Communicate safety related information to the Corporate Crisis Health and Safety Coordinator Identify and provide the ECG Coordinator and / or ECG Chair with evaluations regarding the following safety issues: protection of responders on-site health, safety and medical needs presence of on-site hazardous materials [Consult Material Safety Data Sheets (MSDS) as required] health and safety reporting requirements Communicate requirements to Corporate Crisis Response Team and Mine Site Emergency Command Centre personnel to follow the appropriate safe-work procedures
MONITOR	Health and Safety status of personnel impacted by incident Health and Safety status of responders

1.8 Finance Coordinator

Position: FINANCE COORDINATOR

Role:

- Manages financial aspects of emergency response including access to funds and damage estimates
- Coordinates with the Corporate Crisis Financial Coordinator

Activities:	Tasks:
ASSESS	Funds to manage emergency Access to financial resources Impacts to financial business operations
IMPLEMENT	Notifying insurer(s) of emergency and collects information necessary for a claim Coordinates and assesses the financial and accounting impacts of the incident (lost revenue, damage estimates, potential liabilities, insurance recoveries, etc.). Provides emergency funding, and ensures that proper authorizations and accounting controls are established for costs incurred as a result of the incident.
MONITOR	Emergency status and impacts

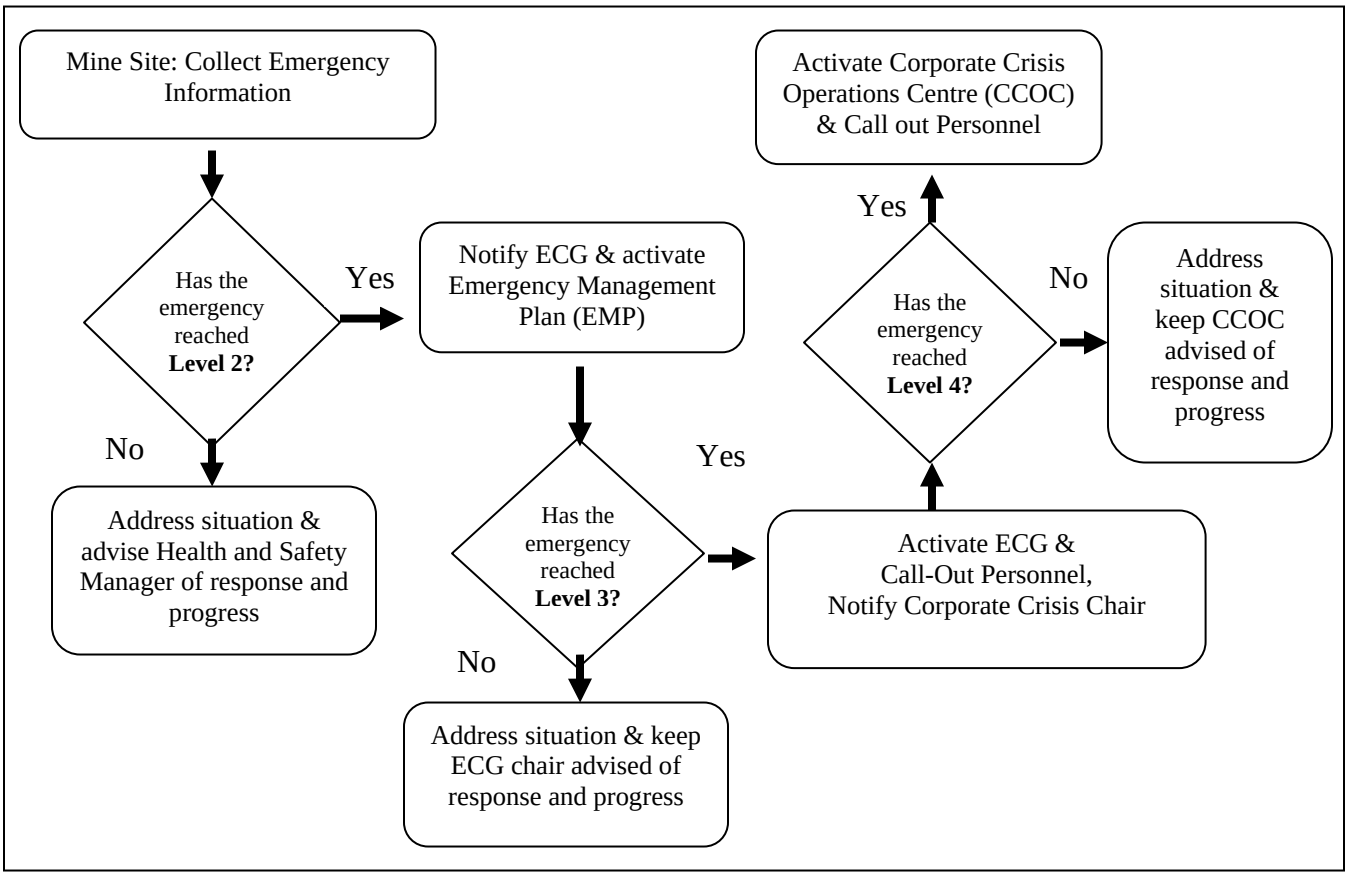
1.9 Events Recorder

Position: EVENTS RECORDER

Role:
- Compile a record of events during the emergency response

Activities:	Tasks:
ASSESS	Types of information required to be complied during emergency response Need for a photographer
IMPLEMENT	Chronologically document all actions, decisions, contacts and requests Collect information from the ECG Chair Collect information from the ECG Coordinator Collect information from the Communications Coordinator Collect information from the Mine Coordinator Collect information from the Surface Coordinator Collect information from the Environmental Coordinator Collect information from the Health and Safety Coordinator Collect information from the Finance Coordinator Record minutes of all ECG meetings Mobilize and supervise the activities of an emergency photographer if required
MONITOR	Emergency status and impacts Ensure all ECG members are keeping complete and accurate records Ensure that a photographic record is being compiled of the emergency and associated response Organize all records, data, communications logs and photos into a cohesive format Create master inventory of all information compiled

2.0 Emergency Response Activation Procedure



Emergency Response Activation Procedure

1. If, in the opinion of the initial responder (first aid or mill control) the emergency has reach a Level 2, or has potential to reach Level 3, notification of the Emergency Command Group (ECG) will be performed. Notification will start with the Chair and progress down the list until someone is notified of the situation.

2. The ECG Member notified will verify the level of the emergency as per criteria defined in Appendix 3 Incident Classification and Notification.

3. Based on this information, the ECG Member will activate the Emergency Management Plan (EMP) and decide whether the Emergency Command Centre (ECC) must be activated and the ECG mobilized to site.

4. If the incident reaches or is expected to reach a Level 3 or higher the ECC shall be activated and ECG members shall mobilize to site. The Corporate Crisis Chair will also be notified.

5. The Mine Site ECG personnel will contact their Corporate Crisis Response Team counterparts to establish communication lines and protocols.

3.0 Incident Classification and Notification Protocol

Level One Alert				
Definition	**Conditions**	**Action Required**	**Notifications**	**Timeline**
An incident which meets any of the following conditions.	• Significant Near Miss • No immediate threat to health and safety of the public or project personnel with low potential to escalate • Non-emergency spill • Handled entirely by company or contract personnel • Minimal environmental effects • Little or no media interest in the incident	• The Supervisor and the On-Site Safety/Environmental will assess and confirm the situation. • On-duty employees trained to respond to this kind of emergency can handle situation. • Does not require the activation of the Emergency Management Plan or the convening of the Emergency Command Group.	• Supervisor • Mill & Surface Manager • Underground Superintendent • Health & Safety Manager during normal business hours	Immediate
			• General Manager	Within 24 hours.
Level Two Alert				
Definition	**Conditions**	**Action Required**	**Notifications**	**Timeline**
An incident which meets any of the following conditions. Considered an Emergency.	• Significant Near Miss • Presents a definite risk to the public, workers or the environment. • Environmental incident with some potential for environmental impact (e.g. moderate sediment release into watercourse) • Can be handled by employees who respond with help from their managers or fellow employees who have been called in before work can resume in the effected area. • May require the mobilization of either the Mine Rescue Team or Surface Emergency Response Team.	• Additional internal and external resources are activated. • Lead regulatory agencies are notified and involved as appropriate. • Mine Rescue team or Surface Emergency Response Team mobilized • Additional notifications are made as required. • Sampling and documentation conducted as required	• Emergency Management Plan is initiated and the Emergency Operations Centre must be notified but may not convene at this point. • Mine site Environmental Manager • Health & Safety Manager during normal business hours • General Manager	Immediate
			• Corporate Office	Within 24 hours.

Level Three Alert				
Definition	**Conditions**	**Action Required**	**Notifications**	**Timeline**
An incident which meets any of the following conditions. Considered an Emergency and / or a Crisis.	• Presents a probable risk to downstream communities of interest • Definitive risk to workers and/or the environment with high severity outcomes. • Involves critical injury or Fatality • Creates local/regional media interest. • Requires involvement of external emergency services, federal and/or provincial agencies. • Significant and ongoing environmental effects Impacts extend beyond property • Normal business operations will be curtailed and employees diverted from routine duties until situation resolved	• Additional internal and external resources are activated. • Lead regulatory agencies are notified and involved. • Mine Rescue team or Surface Emergency Response Team mobilized • Additional notifications are made as required. • Sampling and documentation conducted as required • Communicate emergency response to communities of interest	• The mine site Emergency Operations Centre will be activated • Mine site Environmental Manager • Corporate Crisis Management Chair/Coordinator • Corporate Environmental Manager	Immediate
Level Four Alert				
Definition	**Conditions**	**Action Required**	**Notifications**	**Timeline**
An incident which meets any of the following conditions. Considered a Crisis.	• Significant incident • Fatality or multiple Fatalities • Mine collapse with trapped miners • Major breach of a tailings impoundment • Normal business operations will be curtailed and evacuation of all non-essential personnel from the site • Impact beyond site severe enough to present a definitive risk to downstream communities of interest • Creates national/international media interest.	• Corporate crisis management chair/coordinator must be notified immediately. • The criteria for these categories are broad because what may seem to be a level one or two situation when it first occurs may escalate to a higher level. • Sampling and documentation conducted as required • Lead regulatory agencies are notified and involved. • Communities of interest are notified by mine site to work with their emergency response groups	• The mine site Emergency Operations Centre will be activated • Environmental Manager • Corporate Crisis Management Chair / Coordinator	Immediate

4.0 Specific Incident Protocols

4.1 Flood

Event: Flood

Description:

- Incidents involving flooding at Nyrstar Myra Falls Ltd. that may result in a loss of life or injury, major actual or perceived environmental impact, or significant disruption to operations.
- Does not have a very high risk associated with it however it is included due to the frequency of events over 113 mm/ 24 hrs (2 year probable return).

Activities:	Tasks:
ASSESS	☐ Data from weather station to determine weather conditions ☐ The risk of floodwaters entering the underground workings ☐ The levels of water in the Super Pond, the Old TDF (APA, Strip, and Reclaim Sands Area), Lynx TDF, the Lower Lynx Diversion Ditch and the Myra Ponds
IMPLEMENT	☐ Carry out any practical measures to contain or reduce the impact of the incident. These steps are to be taken as the level water reach the following thresholds ☐ Assess risk that floodwaters can enter the underground and if necessary evacuate all personnel to the surface (Refer to Appendix 8 of this plan for evacuation procedures) ☐ Surface coordinator to locate and report on the status of all heavy equipment. Begin mobilizing to high risk areas ☐ Evacuate underground if necessary ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Isolate personnel not involved in the emergency response in a warm, dry and safe location where they can be fed, kept occupied and communicated with ☐ Begin environmental monitoring as per Environmental Procedures Manual provided conditions are safe • Upstream samples from unusual discharges (2X20L pails and 2X1L bottles) • Samples from source of unusual discharges (2X20L pails and 2X1L bottles) • Downstream samples (2X20L pails and 2X1L bottles) • Effluent discharge rates and samples • Weather data from powerhouse and from the automated station • Piezometer data from the TDF • Myra Creek stage data from the data logger under the bridge ☐ Contact the necessary government authorities: • Ministry of Environment • Ministry of Energy and Mines • Environment Canada • City of Campbell River • Vancouver Island Health Authority • EMCON (if roadways are affected)

- Communicate any health or safety concerns to the local communities affected by the situation.
  - Vancouver Island Health Authority
  - City of Campbell River
  - Strathcona Lodge

MONITOR

- Continue assessing weather conditions for changes
- Continue monitoring flood levels underground and on surface
- Continue monitoring piezometer levels for tailings dam stability. If the stability of the dam becomes at risk refer to the TDF Emergency Preparedness Manual

Specialized Equipment

- Heavy Mobile Equipment
  - Excavator
  - Front-end loader
  - Bulldozer
  - Haul trucks
- Building materials
  - Waste dump #1 can be used for constructing temporary berms
  - Stockpiled riprap in the quarry can be used reinforce containment structures
- Spare pumps
  - Diesel trash pump
  - Electric pumps in warehouse

External and Expert Resources

- Provincial Emergency Program (PEP)
- Campbell River Fire Department
- Campbell River Search and Rescue
- EMCON Services
- Quinsam Coal
- BC Hydro
- Upland Excavating
- WACOR

4.2 Underground Ground Fall

Event: Underground Ground Fall

Description:
- This protocol relates to a ground fall associated with underground operations where there is potential for loss of life or significant disruption to operations

Activities:	Tasks:
ASSESS	☐ Location of the ground fall ☐ Size of ground fall ☐ Potential for further ground fall in the area ☐ Check fans to ensure adequate ventilation ☐ Account for all personnel with the tag board
IMPLEMENT	☐ Restrict access to area of ground fall ☐ If personnel are known to be trapped by ground fall activate Mine Rescue immediately ☐ If personnel unaccounted for evacuate all personnel to refuge stations to account more easily ☐ If personnel still unaccounted for begin rescue operations with mine rescue team ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed**
MONITOR	☐ Continue assessing rock conditions for signs of further failure

Specialized Equipment and Personnel
- Heavy Mobile Equipment
  - Scoop
  - Rock breaker
- Personnel
  - Rock Mechanic

External and Expert Resources
- Quinsam Coal Mine Rescue Team

4.3 Liquid Spill Onsite

Event: Liquid Spill Onsite

Description:
- This protocol relates to liquid spills at the mine site and includes the spilling of fuel and oil, hazardous waste and chemicals.

Activities:	Tasks:
ASSESS	Ensure no one is in any immediate danger Ensure employees are accounted for Quantity and nature of material to determine appropriate response
IMPLEMENT	Rope off affected area and limit access to those that are required to respond to the spill Activate SERT Team to begin containment and clean up if material is hazardous If spill is none hazardous the surface crew may be dispatched to contain the spill Evacuate areas around spill if necessary Shut off source of spill of possible Contain spill to prevent material from flowing to Myra Creek or other water ways Clean up spilled material Report spill to the following agencies if the spill enters a water way: • Provincial Emergency Program (PEP) • Vancouver Island Health Authority (VIHA) • City of Campbell River • Ministry of Energy and Mines (MEM) • Contact information is found in the Environmental Emergency Response Manual
MONITOR	If spill is of combustible material continue to monitor area for ignition sources Continually assess whether outside resources are required Collect samples to determine the impact of the spill Duration of spill to calculate quantity of material spilled Estimate flow rate or volume spilled

Specialized Equipment and Personnel
- Heavy Mobile Equipment
  - Excavator – contact surface supervisor for location
  - Loader – contact surface supervisor for location
  - Backhoe – contact surface supervisor for location
- Spill Response Equipment
  - Absorbent booms – available in the warehouse
  - Absorbent pads – available in the warehouse

  - 20 liter blue pails for sample collection – available in the warehouse
  - 1 liter bottles for sample collection – available in the Enviro Lab
- Personnel
  - SERT Team
  - Environmental Department

External and Expert Resources

- Vacuum truck – Barrie's Septic – (250) 287-2947
- Regional Spill Kit – Chevron – Dave Facey – (250) 286-1136
- Burrard Clean – Vancouver – (604) 985-0855
- For additional resources refer to the **EMP Manual 4: Environmental Emergency Response.**

4.4 Liquid Spill Offsite

Event: Liquid Spill Offsite

Description:
- This protocol relates to liquid spills along the road between Campbell River and the mine site caused by either mine vehicles or contractor vehicles

Activities:	Tasks:
ASSESS	☐ Ensure no one is in any immediate danger ☐ Quantity and nature of material to determine appropriate response ☐ Where the spilled material is going and what needs to be done to contain it
IMPLEMENT	☐ Secure affected area and limit access to those that are required to respond to the spill ☐ Activate SERT Team to begin containment and clean up if material is hazardous ☐ If spill is none hazardous the surface crew may be dispatched to contain the spill ☐ Contact EMCON Services to notify them of an incident on the highway ☐ Contain spill to prevent material from flowing to Buttle Lake or other water ways ☐ Clean up spilled material ☐ It may be necessary to excavate and remove any contaminated soil – **Any contaminated soil must NOT be transported back into Strathcona Park** ☐ Report spill to the following agencies if the spill enters a water way: • Provincial Emergency Program (PEP) • Vancouver Island Health Authority (VIHA) • City of Campbell River • Ministry of Energy and Mines (MEM) • Contact information is found in the Environmental Emergency Response Manual
MONITOR	☐ If spill is of combustible material continue to monitor area for ignition sources ☐ Continually assess whether outside resources are required ☐ Collect samples to determine the impact of the spill ☐ Estimate volume spilled and extent of the impact (how far the spilled material extends)
	Specialized Equipment and Personnel • Heavy Mobile Equipment o Excavator – contact surface supervisor for location or from EMCON o Backhoe – contact surface supervisor for location or from EMCON o Dump Truck – contact surface supervisor for location or from EMCON • Spill Response Equipment o Absorbent booms – available in the warehouse

  - Absorbent pads – available in the warehouse
  - 20 liter blue pails for sample collection – available in the warehouse
  - 1 liter bottles for sample collection – available in the Enviro Lab
- Personnel
  - SERT Team
  - Environmental Department

External and Expert Resources

- Vacuum truck – Barrie's Septic – (250)287-2947
- Regional Spill Kit – Chevron – Dave Facey – (250)286-1136
- Burrard Clean – Vancouver – (604)985-0855
- For additional resources refer to the Environmental Emergency Response Manual

4.5 Liquid Spill at Discovery Terminal

Event: Liquid Spill at Discovery Terminal

Description:
- This protocol relates to liquid spills at the Discovery Terminal Site. The most likely cause of such a spill would be a fuel or oil spill from a ship tied up along dock.

Activities:	Tasks:
ASSESS	☐ Ensure no one is in any immediate danger ☐ Quantity and nature of material to determine appropriate response ☐ Where the spilled material is going and what needs to be done to contain it ☐ Determine the cause – whether a broken line or a punctured hull or other cause ☐ Assess tides to determine where the spilled material is likely to migrate to
IMPLEMENT	☐ Contact Corporate Communications Coordinator ☐ Contact Chevron to activate the regional spill kit ☐ Notify Campbell River Harbour Authority – (250) 287-7931 ☐ Notify Fisheries and Oceans – (250) 850-5701 ☐ Report spill to the following agencies if the spill enters a water way: • Provincial Emergency Program (PEP) • Vancouver Island Health Authority (VIHA) • City of Campbell River • Ministry of Energy and Mines (MEM) • Contact information is found in the Environmental Emergency Response Manual
MONITOR	☐ If spill is of combustible material continue to monitor area for ignition sources ☐ Continually assess whether outside resources are required – if so refer to Environmental Emergency Response Plan ☐ Collect samples to determine the impact of the spill ☐ Estimate volume spilled and extent of the impact (how far the spilled material extends) **Specialized Equipment and Personnel** • Spill Response Equipment o Absorbent booms – available in the warehouse o Absorbent pads – available in the warehouse o 20 liter blue pails for sample collection – available in the warehouse o 1 liter bottles for sample collection – available in the Enviro Lab **External and Expert Resources** • Regional Spill Kit – Chevron – Dave Facey – (250)286-1136 • Burrard Clean – Vancouver – (604)985-0855 • For additional resources refer to the Environmental Emergency Response Manual

4.6 Vehicle Accident Offsite

Event: Vehicle Accident Offsite

Description:

- This protocol relates to a vehicle accident off the mine site involving a company vehicle or a personal vehicle belonging to employees commuting to and from work.

Activities:	Tasks:
ASSESS	The location of the accident to determine if the MFO SERT Team or emergency services from Campbell River are most appropriate to respond The number of victims involved in the accident and the status of those victims Whether an environmental response to clean of a fuel spill is required
IMPLEMENT	Close the road the ensure the safety of the victims and the responders as well as preserving the integrity of the accident scene for an investigation Designate flag people to control the flow of traffic Brief the SERT team on the known details and mobilize them for response Identify and ensure first aid/medical treatment of casualties **Do not divulge personal details of casualties until next of kin have been informed** The SERT leader is to yield command of the emergency response to the emergency responders from Campbell River or Gold River when they arrive If there is a significant fuel spill notify the Environment Department for an appropriate response. If none of the Environment Team can be notified refer to the Environmental Emergency Response Plan If there is a volume of spilled material into a water way report to the following agencies: • Provincial Emergency Program (PEP) • Vancouver Island Health Authority (VIHA) • City of Campbell River • Ministry of Energy and Mines (MEM) • Contact information is found in the Environmental Emergency Response Manual
MONITOR	If spill is of combustible material continue to monitor area for ignition sources Continually assess whether outside resources are required – if so refer to Environmental Emergency Response Plan Collect samples to determine the impact of the spill Estimate volume spilled and extent of the impact (how far the spilled material extends) **Specialized Equipment and Personnel** o SERT Fire Truck and turnout gear **External and Expert Resources** • Campbell River - 911

4.7 Underground Fire

Event: Underground Fire

Description:
- This protocol relates to a fire associated with underground operations where there is a potential for loss of life or significant disruption to operations.

Activities:	Tasks:
ASSESS	☐ Determine the location of the fire and the areas of the mine affected ☐ The number of victim and number of personnel underground ☐ If possible determine the nature and cause of the fire to better inform the mine rescue crew ☐ Contact Cage Tender to determine the location and condition of the cage for evacuation ☐ Determine if additional resources from Quinsam Coal need to be requested
IMPLEMENT	☐ Ensure Hoistman has injected stench as per his procedure to initiate evacuation ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Isolate personnel not involved in the emergency response in a warm, dry and safe location where they can be fed, kept occupied and communicated with ☐ Mine Coordinator to assign following duties: • Stench Warning Coordinator • Check-in and Check-out coordinator for emergency responders • Tag Board Coordinator • Emergency Response Team Coordinator • Ventilation Coordinator • Security/Medical Services Coordinator ☐ Use tag board to account for all personnel ☐ Check main fans to ensure they are operating and adjust response accordingly ☐ Notify Refuge Stations to seal doors ☐ Brief Emergency Response Team before deployment
MONITOR	☐ Periodically evaluate action taken and determine further actions ☐ Monitor status of emergency responders ☐ Monitor status of the ventilation fans
	Specialized Equipment and Personnel • BG 174 Breathing Apparatuses – Mine Rescue Room
	External and Expert Resources • Quinsam Coal Mine Rescue Team

4.8 Surface Fire

Event: Surface Fire

Description:
- This protocol relates to a fire on the surface of the mine site that affects one or more aspects of the infrastructure

Activities:	Tasks:
ASSESS	☐ Which aspects of the infrastructure are currently being affected by the fire ☐ Which aspects of the infrastructure are threatened by the fire ☐ Whether the MFO SERT Team has the required resources to suppress the fire or whether additional resources are required from Campbell River or Gold River ☐ Evaluate the threat to the underground to determine whether it needs to be evacuated ☐ In the event of a fire in the Administration Building or Surface Shop, the Mine Coordinator will assess whether the Underground Fire protocol needs to be implemented
IMPLEMENT	☐ Evacuate the affected and threatened areas of the infrastructure ☐ Evacuate underground if necessary ☐ Designate a Roll Call Coordinator ☐ Mobilize SERT Team and request additional resources if necessary • SERT Commander to coordinate fire suppression efforts • Brief SERT Team before deployment to the scene ☐ Account for all personnel to ensure nobody is trapped in a building ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Isolate personnel not involved in the emergency response in a warm, dry and safe location where they can be fed, kept occupied and communicated with ☐ Contact the necessary government authorities (after Corp. Communications): • Ministry of Environment • BC Parks • Ministry of Energy and Mines • Environment Canada • City of Campbell River • Vancouver Island Health Authority ☐ Contact BC Forest Service to advise them of the forest and of the risk that the fire could spread and become a forest fire **(1-800-663-5555)** ☐ Communicate any health or safety concerns to the local communities affected by the situation. • Vancouver Island Health Authority • City of Campbell River • Strathcona Lodge

MONITOR

- Continue assessing weather conditions for changes in wind patterns
- Continue monitoring the fire for increased threats to the underground or to additional infrastructure that may need to be evacuated
- Continue to monitor water levels in the fire water tanks to ensure adequate water supply for the firefighting effort. Set up fire pumps in Arnica Creek, Webster Creek or Myra Creek to augment fire water if required

Specialized Equipment

- Heavy Mobile Equipment
  - Excavator
  - Front-end loader
  - Bulldozer
- Fire Fighting Equipment
  - MFO Fire Truck
  - Turn Out Grear
  - MSA 401 Breathing Apparatuses
- Spare pumps
  - Fire Pumps
  - Diesel trash pump
  - Electric pumps in warehouse

External and Expert Resources

- Provincial Emergency Program (PEP)
- Campbell River Fire Department
- Campbell River Search and Rescue
- EMCON Services
- Quinsam Coal
- BC Hydro
- Upland Excavating
- WACOR
- BC Forest Service

4.9 Wind Storm

Event: Wind Storm

Description:

- This protocol relates to a destructive wind storm in the vicinity of Myra Falls and due to the protected nature of the valley mostly pertains to the road between Campbell River and Nyrstar Myra Falls Ltd.

Activities:	Tasks:
ASSESS	The weather information from www.weatheroffice.com and www.theweathernetwork.com for details from Port Alberni, Gold River, Courtenay and Campbell River The threat to access to and from the mine site for emergency equipment • Falling trees • Debris flows • Road washouts The risk to vehicles from potential falling trees
IMPLEMENT	After the situation is assessed determine whether to close road Mobilize surface crew to remove fallen trees and/or debris on road Contact EMCON to begin clearing fallen trees and/or debris on road from north end If emergency vehicles such as the ambulance cannot travel safely between the mine site and Campbell River the mine is to be shut down until access to Campbell River can be restored Shutting down the mine does not require stench gas, it can be conducted in an orderly manner by radio communication as there is no urgency
MONITOR	Continue to periodically reassess the weather patterns to determine the threat to the roadway Reassess whether the road is safe for travel and whether the mine can safely resume operations

Specialized Equipment and Personnel

- Heavy Equipment
  - Front end loader
  - Chain saw

External and Expert Resources

- EMCON Services

4.10 Heart Attack/Stroke

Event: Heart Attack/Stroke

Description:
- This protocol relates to a situation whereby an employee, contractor, visitor or member of the public has either a stroke or a heart attack. This protocol assumes that the victim remains alive.

Activities:	Tasks:
ASSESS	☐ The location of the victim ☐ The nature of the incident and the condition of the victim
IMPLEMENT	☐ If incident is underground First Aid is to remain in the First Aid building until emergency services are requested • Ensure cage or hoistman is contacted and the cage is in the most effective location to provide assistance • Have ambulance brought to the headframe ☐ If incident is on surface First Aid is to provide immediate assistance • Have ambulance brought to location closest to the victim ☐ Call hospital in Campbell River to inform them of the victim's condition and relay all information gathered so far **(Hospital # 250-287-7111)** ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Assign staff to monitor the telephones in First Aid building while the Attendant is providing first aid ☐ Notify First Aid Attendant staying in camp ☐ Arrange for transportation: • Ambulance – 911 or 250-286-1155 ▪ Arrange for ambulance to meet Nyrstar Myra Falls Ltd. ambulance half way along road to Campbell River • Helicopter ▪ EB Helicopters (250) 287-4421 ▪ West Coast Helicopters (250) 286-8863 (24 hours) ▪ Canadian Helicopters (250) 286-6118
MONITOR	☐ Maintain communications with medical transportation via radio systems

Specialized Equipment and Personnel
- First Aid Level 3 Equipment

External and Expert Resources
- Helicopter – see above
- St. John's Ambulance

4.11 Trauma – Not Resulting in a Fatality

Event: Trauma – Not Resulting in a Fatality

Description:

- This protocol relates to a situation whereby an employee, contractor, visitor or member of the public has been injured and requires medical attention. This protocol assumes that the victim remains alive.

Activities:	Tasks:
ASSESS	☐ The location of the victim ☐ The nature of the incident and the condition of the victim ☐ Whether there is safe passage to the scene for the responders
IMPLEMENT	☐ If incident is underground First Aid is to remain in the First Aid building until emergency services are requested • Ensure cage or hoistman is contacted and the cage is in the most effective location to provide assistance • Have ambulance brought to the headframe ☐ If incident is on surface First Aid is to provide immediate assistance • Have ambulance brought to location closest to the victim ☐ Restrict access to emergency responders by roping off the area. This is to secure the scene for any pending investigation concerning the accident. ☐ Notify the Manager of Loss Control and Training ☐ Call hospital in Campbell River to inform them of the victim's condition and relay all information gathered so far **(Hospital # 250-287-7111)** ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Assign staff to monitor the telephones in First Aid while the First Aid Attendant is providing ☐ Notify First Aid Attendant staying in camp ☐ Arrange for transportation: • Ambulance – 911 or 250-286-1155 ▪ Arrange for ambulance to meet Nyrstar ambulance half way along road to Campbell River • Helicopter ▪ EB Helicopters (250) 287-4421 ▪ West Coast Helicopters (250) 286-8863 (24 hours)
MONITOR	☐ Maintain communications with medical transportation via radio systems ☐ After the victim is secured and the scene is deemed to be safe begin investigation procedures. **Specialized Equipment and Personnel** • First Aid Level 3 Equipment **External and Expert Resources** • Helicopter – see above • St. John's Ambulance

4.12 Multiple Victim Incidents

Event: Multiple Victim Incidents

Description:

- This protocol relates to a situation whereby more than one employee, contractor, visitor or member of the public has been injured and requires medical attention. This protocol assumes that at least one of the victims remains alive.

Activities:	Tasks:
ASSESS	☐ The location of the victims ☐ The nature of the incident and the condition of the victims ☐ Whether there is safe passage to the scene for the responders ☐ Whether additional resources from Campbell River or Quinsam Coal will be required
IMPLEMENT	☐ If incident is underground First Aid is to remain in the First Aid building until emergency services are requested • Ensure cage or hoistman is contacted and the cage is in the most effective location to provide assistance • Have ambulance brought to the headframe ☐ If incident is on surface First Aid is to provide immediate assistance • Have ambulance brought to location closest to the victim ☐ Call hospital in Campbell River to inform them of the victim's condition and relay all information gathered so far **(Hospital # 250-287-7111)** ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Assign staff to monitor the telephones in the First Aid building while the First Aid Attendant is providing first aid ☐ Notify First Aid Attendant staying in camp ☐ Arrange for transportation: • Ambulance – 911 or 250-286-1155 ▪ Arrange for ambulance to meet Nyrstar Myra Falls Ltd. ambulance half way along road to Campbell River • Helicopter ▪ EB Helicopters (250) 287-4421 ▪ West Coast Helicopters (250) 286-8863 (24 hours)
MONITOR	☐ Maintain communications with medical transportation via radio systems ☐ Begin investigation after all victims have been stabilized and removed from the scene **Specialized Equipment and Personnel** • First Aid Level 3 Equipment **External and Expert Resources** • St. John's Ambulance • Quinsam Coal Emergency Response Team

4.13 Concentrate Spill at Discovery Terminal

Event: Concentrate Spill at Discovery Terminal

Description:
- This protocol relates to a spill of concentrate during ship loading at the Discovery Terminal in Campbell River

Activities:	Tasks:
ASSESS	☐ The nature of the spill, is the ship being loaded remain intact ☐ The tide and current at the time of the spill to determine which direction the concentrate would be carried ☐ The wind direction and speed to determine how far on surface the concentrate dust may be carried ☐ What can be done to contain the spilled concentrate ☐ Determine the cause if possible
IMPLEMENT	☐ Contact Corporate Communications Coordinator ☐ Contact Chevron to activate the regional spill kit ☐ Notify Campbell River Harbour Authority – (250) 287-7931 ☐ Notify Fisheries and Oceans – (250) 850-5701 ☐ Report spill to the following agencies if the spill enters a water way: • Provincial Emergency Program (PEP) • Vancouver Island Health Authority (VIHA) • City of Campbell River • Ministry of Energy and Mines (MEM) • Contact information is found in the Environmental Emergency Response Manual ☐ Ensure all communications with the media and public are approved by the Corporate Communications Coordinator, the ECG Chair and routed through the ECG Communications Coordinator
MONITOR	☐ The spread of the concentrate on the water and on surface around the terminal ☐ Continually assess whether outside resources are required – if so refer to Environmental Emergency Response Plan ☐ Estimate volume spilled and extent of the impact (how far the spilled material extends) ☐ The media response to the spill ☐ Evaluate actions already taken and modify plan accordingly **External and Expert Resources** • Regional Spill Kit – Chevron – Dave Facey – (250)286-1136 • Burrard Clean – Vancouver – (604)985-0855 • For additional resources refer to the Environmental Emergency Response Manual

4.14 Helicopter Crash

Event: Helicopter Crash

Description:
- This protocol relates to the crash of a helicopter while conducting business for Nyrstar Myra Falls Ltd. (NMF)

Activities:	Tasks:
ASSESS	☐ How many passengers were on the helicopter ☐ Approximately where the crash site is if possible ☐ If not able to determine the crash site determine the planned flight path or area the helicopter was working in ☐ Determine what the weather conditions are and whether it is safe for a rescue ☐ Determine risk that the crash site could result in a forest fire and if deemed appropriate implement the forest fire protocol in this plan
IMPLEMENT	☐ Contact the Joint Rescue Co-ordination Centre in Victoria to mobilize air support ☐ Contact Comox Ground Search and Rescue and Campbell River Ground Search and Rescue to begin ground support operations ☐ Defer to Search and Rescue personnel to take lead on the rescue and provide whatever assistance that is requested ☐ Coordinate with RCMP to notify next-of-kin ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Notify BC Parks and the Mines Inspector (MEM)
MONITOR	☐ Continue to work with Search and Rescue to determine if their needs change with respect to the assistance NMF is providing ☐ Monitor local and provincial media sources and prepare to issue information to the press through the ECG Communications Coordinator (approved first by Corporate Communications Coordinator).
	External and Expert Resources • Comox Ground Search and Rescue – (250) 334-3211 • Campbell River Ground Search and Rescue – (250) 923-2500 • Joint Rescue Co-ordination Centre Victoria – (800) 567-5111 • For additional resources refer to the Environmental Emergency Response Manual

4.15 Bus Accident

Event: Bus Accident

Description:
- This protocol relates to the crash of a Bus while conducting business for Nyrstar Myra Falls Ltd.

Activities:	Tasks:
ASSESS	☐ The location of the accident ☐ The possible number of victims (i.e., was it a full bus or empty bus) ☐ The severity of the accident ☐ The need for an environmental response
IMPLEMENT	☐ Brief SERT team and mobilize them to the accident site ☐ Contact Campbell River Emergency Services (911) and request assistance to the accident site. Provide info on estimated number of victims ☐ Close road and post flag people at each side of the accident scene to ensure the safety of responders and the integrity of the scene for investigation purposes ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Assign staff to monitor the telephones in the First Aid building while the First Aid Attendant is attending to the accident scene ☐ Notify First Aid Attendant staying in camp ☐ Coordinate with RCMP to notify next-of-kin and consider establishing a location in town where family of those involved in the accident can gather for information and support ☐ Generate a list of who is on the bus and who was injured and who was not
MONITOR	☐ Monitor the coordination of the accident response ☐ Evaluate actions already taken and modify plan accordingly ☐ Continually assess whether additional outside resources are required ☐ Update list of those injured and those not according to information received from responders ☐ Monitor media response to the crash and respond accordingly through the ECG Communications Coordinator **Specialized Equipment and Personnel** • First Aid Level 3 Equipment • Fire Truck and Turnout Gear • Ambulance **External and Expert Resources** • Campbell River Emergency Services - 911

4.16 Tailings Dam Failure

Event: Tailings Dam Failure to Surface

Description:
- This protocol relates to the failure of the Tailings Dam Facility (TDF) to surface environment

Activities:	Tasks:
ASSESS	☐ The size of the failure and the extent of any mobilized tailings or effluent ☐ Account for all personnel working in the vicinity of the Tailings Dam ☐ Assemble and brief an inspection team to assess the dam failure ☐ Immediately notify the Engineer-of-record (AMEC Foster Wheeler) ☐ Notify MEM of "Dangerous or unusual occurrence"
IMPLEMENT	☐ Have the area roped off to ensure no access to area except those required to respond to the emergency ☐ If the Admin building, shaft, camp or surface shop are affected or are at risk the ECG Chair may enact underground emergency procedures ☐ Establish communications with Corporate Communications Coordinator ☐ Establish communications with local authorities if they are to be affected and determine their emergency needs and possible assistance, if required ☐ Establish communications with downstream residents including Strathcona Park Lodge and the City of Campbell River (250)286-3122 ☐ Implement the TDF Emergency Preparedness Plan to begin to mitigate the failure ☐ Implement recommendations of the inspection team after the initial assessment
MONITOR	☐ Water quality downstream of tailings dam failure as per the Environmental Emergency Response Plan ☐ Evaluate how far the tailings migrate downstream on an ongoing basis ☐ Evaluate actions already taken and modify plan accordingly

External and Expert Resources
- Dan Hughes-Games, P.Eng., AMEC Foster Wheeler – Engineer-of-record
  - Office 250-758-1887
  - [redacted]
- Campbell River Fire Department - 911
- Canutec – (613) 996-6666

Specialized Equipment
- Heavy Equipment – Excavators, Haul trucks, Dozers
- Stockpile of riprap (Quarry) and fine material (Cookhouse Area)

References
- Nyrstar Myra Falls Ltd. Tailings Dam Facility Emergency Preparedness Plan
- Nyrstar Myra Falls Ltd. Environmental Emergency Response Plan

4.16 Tailings Dam Failure

Event: Tailings Dam Failure to Lynx Underground

Description:
- This protocol relates to the failure of the Lynx Tailings Dam Facility (TDF) to underground workings

Activities:	Tasks:
ASSESS	☐ The size of the failure and the extent of any mobilized tailings or effluent ☐ Account for all personnel working in the vicinity of the Tailings Dam and in Lynx Underground ☐ Assemble and brief an inspection team to assess the dam failure ☐ Immediately notify the AMEC Foster Wheeler ☐ Notify MEM of "Dangerous or unusual occurrence"
IMPLEMENT	☐ Have the area roped off to ensure no access to area except those required to respond to the emergency ☐ Enact underground emergency procedures ☐ Evacuate underground ☐ Identify and ensure first aid/medical treatment of casualties ☐ **Do not divulge personal details of casualties until next of kin have been informed** ☐ Establish communications with Corporate Communications Coordinator ☐ Establish communications with local authorities if they are to be affected and determine their emergency needs and possible assistance, if required ☐ Implement the TDF Emergency Preparedness Plan to begin to mitigate the failure ☐ Implement recommendations of the inspection team after the initial assessment
MONITOR	☐ Evaluate how far the tailings migrate downstream on an ongoing basis ☐ Evaluate actions already taken and modify plan accordingly
	External and Expert Resources • Dan Hughes-Games, P.Eng., AMEC Foster Wheeler – Engineer-of-record o Office 250-758-1887 o [redacted] • Campbell River Fire Department - 911 • Canutec – (613) 996-6666
	Specialized Equipment

- Mines Rescue Response Equipment

References

- Nyrstar Myra Falls Ltd. Tailings Dam Facility Emergency Preparedness Plan
- Nyrstar Myra Falls Ltd. Environmental Emergency Response Plan

4.16 Tailings Dam Instability

Event: Tailings Dam Cracking / Sloughing

Description:
- This protocol relates to the discovery of cracks / sloughing of the Tailings Dam Facility (TDF) Embankment

Activities:	Tasks:
ASSESS	- The size of the crack / slough and the extent of any visible seepage of tailings or effluent - Immediately Notify AMEC Foster Wheeler so that they may specify a course of action (site visit may be warranted based on size / location of issue) - Notify MEM of "Dangerous or unusual occurrence"

IMPLEMENT	- AMEC Foster Wheeler will determine the severity of the situation. Depending on the severity, one or more of the following actions may be required:
	  • Establish communications with local authorities if they are to be affected and determine their emergency needs and possible assistance
	  • Implement the TDF Emergency Preparedness Plan
	- Implement recommendations of the inspection team after the initial assessment

MONITOR	- Crack / slough area for deepening / worsening of cracking - Water quality downstream of tailings dam failure as per the Environmental Emergency Response Plan - Evaluate effectiveness of initial repairs - Evaluate actions already taken and modify plan accordingly

External and Expert Resources

- Dan Hughes-Games, P.Eng., AMEC Foster Wheeler – Engineer-of-record
  - Office 250-758-1887
  - [redacted]
- Ministry of Energy and Mines (MEM)

Specialized Equipment

- Heavy Equipment – Excavators, Haul trucks, Dozers
- Stockpile of riprap (Quarry) and fine material (Cookhouse Area)

References

- Nyrstar Myra Falls Ltd. Tailings Dam Facility Emergency Preparedness Plan
- Nyrstar Myra Falls Ltd. Environmental Emergency Response Plan

4.17 Fatality

Event: Fatality

Description:
- This protocol relates to an incident resulting in at least one fatality at the mine site

Activities:	Tasks:
ASSESS	Assess the scene to ensure the safety of the responders and investigators Determine the resources to recover the victim Determine what personnel are required to conduct the investigation
IMPLEMENT	Mobilize and brief Mine Rescue Team for recovery efforts If incident is underground First Aid is to remain in the First Aid building until emergency services are requested • Ensure cage or hoistman is contacted and the cage is in the most effective location to provide assistance • Have ambulance brought to the headframe If incident is on surface First Aid is to provide immediate assistance • Have ambulance brought to location closest to the victim **Do not divulge personal details of casualties until next of kin have been informed** Assign staff to monitor the telephones in First Aid building while the Attendant is providing first aid Notify First Aid Attendant staying in camp Secure the accident site for recovery and investigation purposes Assemble and brief investigation team then mobilize them to the accident site Notify the Mines Inspector ECG Chair to make decision on shutting down operations and sending people home. Contact PW Transport to mobilize buses to take employees home Activate Critical Incident Stress Debriefing for those involved in the accident, responders and investigators as necessary. Also consider making the critical incident stress debriefing services available for all employees
MONITOR	Continually assess the accident scene for the continued safety of the responders and investigators Monitor the disposition of the employees not involved in the response and keep them occupied and informed as much as possible Evaluate actions already taken and modify plan accordingly including both the progress of the response and the investigation Monitor media response and coordinate the release of information through the ECG Communications Coordinator
	External and Expert Resources • Ministry of Energy and Mines (MEM) **Specialized Equipment** Mines Rescue Response Equipment

5.0 Emergency Command Centre

Having a designated Emergency Command Centre that can be set up quickly and effectively is integral to a well-coordinated emergency response. NMF's designated Emergency Command Centre is the Boardroom in the H-W Building. This location was chosen for its central location, and the ease at which it can be isolated from the media and the general employment base. Below are the steps to take during the start of an emergency to convert the Boardroom to an Emergency Command Centre:

- Take a computer from the Engineering Department that is equipped with Promine and Gems and plug the computer into the projector permanently set up in the Board Room.
    - This will ensure that the Emergency Command Group will have access to the most current and up-to-date drawings and maps of both the underground and surface.
- There are two phone lines available in the Boardroom. This will allow for two direct outside lines to be available in the Emergency Command Centre.
    - A speaker phone can be brought in as one of the phones
    - Other lines are available in nearby offices.
- There are already multiple internet cable connections available for laptops to be added to the network and all Emergency Command Group personnel with laptops have access to the wireless connection within the H-W Building. Guest internet for external users is available wirelessly.
- A large whiteboard is permanently mounted to wall and the Safety and Health Manager maintains a box of fresh markers with the cordless phones in the Emergency Command Centre Kit as outlined in the Emergency Preparedness Manual.
- Handheld Radios will also be available in the Emergency Command Centre Kit. These are pre-programmed with all the mine site channels. One radio is to be set on the first aid channel, one on the mill channel and one on the underground channel. This will allow the Emergency Command Group to keep up to date easily with events and will allow them direct communication with the Emergency Responders.

Emergency Command Center Phone Line = extension 3310

6.0 Initial Emergency Response Protocols

6.1 Emergency Initial Response Procedure

1. Normally Mill Control Room Operator will receive emergency calls. Mill Control Room Operator is to inform First Aid if he leaves work area.

2. When the Emergency Number **555** rings the Mill Control Room Operator will answer it. Following the 2nd ring the Hoistman and/or First Aid Attendant will answer or listen in to the call if already answered.

3. All Emergencies: Follow and complete Emergency Initial Response Form.

4. Underground Emergency: **Call or have someone call the people listed below and give details of the emergency:**

Dayshift	Nightshift
a) Hoistman (ext. 3253)	a) Hoistman (ext. 3253)
b) Mining Manager (ext. 3262)	b) Supervisor (ext. 3231 or 3360) or via radio
c) First Aid (ext. 3318)	c) First Aid (ext. 3318)
d) Mine Captain (ext. 3361)	d) Mill Shift Supervisor, if U/G Supervisor not notified (ext. 3282)
e) Mining Manager (ext. 3262)	e) Mining Manager (250-202-1104)
f) Safety (ext. 3222)	f) Safety and Health Mgr. (250-202-9467)
g) General Manager (ext. 3279)	g) General Manager, Sr. Staff House Room 14

5. Surface/Mill Fire or Other Emergency

a) Activate evacuation alarm if a mill emergency
b) Call or have someone call the people listed below and give details of the emergency:

Dayshift	Nightshift
a) Incident Commander (ext. 3282)	a) Incident Commander (ext. 3282)
b) Mill and Surface Manager (ext. 3269)	b) Mill and Surface Manager
c) First Aid (ext. 3318)	c) First Aid (ext. 3318)
d) Safety (ext. 3222 or)	d) Supervisor (ext. 3231/3360) if buildings near the head frame is affected
e) General Manager (ext. 3279)	e) Health and Safety Mgr. (250-202-9467)
f) Mining Manager (ext. 3262) if buildings near the head frame are affected	f) General Manager, Sr. Staff House Room 14

6.2 Designated Assembly Areas

DESIGNATED ASSEMBLY AREAS		
Location of Emergency	Assembly Area	Alternate
H-W Mine	**Refuge Stations: phone #** 18 –244 408 18 L Old Shop 438 18 L New Shop 415 18 L 173 463 20 L 371 400 20 L 316 410 21 L Shop 431 21 – 329 401 23 – 338 453 23 – K330 445 23 – 325 413 23 – 370 443 23 – 431 453 24 L 404 24 –332 417 25 L 405 26 L 406 Lynx 10 level 275	
Mill	Staff House Local 3237	Training Centre Local 3331
Administration Building	Training Centre Local 3331	H-W Head frame Local 3328
H-W Shop / Warehouse	Training Centre Local 3331	H-W Head frame Local 3328
Surface Shops, Camp, Assay Lab, Paste Plant, Powerhouse	Staff House Local 3237	Training Centre Local 3331
Staff House	Rec. Hall Local 3263	Training Centre Local 3331
Terminal	Terminal Shop 250-286-1714	Terminal Trailer 250-286-1587

6.3 Evacuation Procedures

Stench Gas Procedures

In the event of an underground emergency, the incident commander who would normally be the mine superintendent will appoint a stench warning coordinator

Duties of Stench Warning Coordinator

1. Ensure Stench Warning System initiated (see instructions on next page)

Station	Time Initiated	Time Replaced
H-W Hoistroom		
H-W Gravel Raise		
H-W No. 1 Raise		
H-W No. 2 Raise		
1800 Fresh Air Raise		
Lynx 10		
Philips Reach		

2. Inform Emergency Command Centre times Stench Warning System initiated

3. Immediately replace empty canisters with fully charged canisters located in the surface warehouse.

4. Inform Emergency Command Centre when systems have been replaced with new canisters

5. Instruct supervisors to blow out compressed air lines with neutralizer when returning to underground after “all clear” signal has been given by Emergency Command Centre

INSTRUCTIONS

Hoist man to contact beat 4 Supervisor @ ext. # 3322 or Production Supervisor @ ext. # 3361 or 431 or via radio to confirm requirement for stench injection.

Note: No delay is to occur in injecting stench if Emergency Command Centre or Shift boss cannot be contacted immediately.

1.0 Pull safety pin and press the red button located at the main fan-monitoring console. This injects stench into the ventilation system at the Gravel Raise, Fresh Air Raise No.1 & No. 2, and at 1800 Level Fresh Air Raise.

2.0 Manually inject stench into the compressed air system by;

(a) turning stench gas canister valves to fully open position
(b) turning airline valve to fully open position

3.0 Check surface and 1800 level low pressure warning indication lights. They should be on at the main fan-monitoring console. If they are not on or the communication failure alarm light is on contact First Aid or cage tender to manually inject stench into the Gravel Raise, Fresh Air Raise No.1 & No. 2, and at Lynx.

4.0 Confirm to Stench Warning Coordinator or Mine Shifter that stench has been injected.

If stench is required at Philip's Reach, Lynx 5 or Lynx 10, Hoist man is to contact mill shifter at ext. # 3282 or via radio and instruct him to proceed to the stench initiation locations and manually release the stench gas.

Philips Reach

1. Stench initiation station is located just outside the portal
2. Break seal and open bottle valve.
3. Confirm to Stench Warning Coordinator or Mine Shifter that stench has been initiated.

Lynx 10

1. Stench initiation station is located inside the portal closest to the lynx shop
2. Break seal and open bottle valve and in-line valve.
3. Confirm to Stench Warning Coordinator or Mine Shifter that stench has been initiated

Lynx 5

1. Stench initiation station is located just outside the portal
2. Break seals and open both bottle valves
3. Confirm to Stench Warning Coordinator or Mine Shifter that stench has been initiated

Price Alamac Raise

The new alamac raise has an independent supply of compressed air used for both drilling and ventilation. In the event of a fire emergency in HW, stench from the main ventilation system would not reach miners up in the raise. In this case, an independent stench system is required. Stench will be manually injected into the compressor that supplies the alamac raise with air. The incident commander will designate someone to proceed to the price compressor and activate the system. This person would most likely be the price supervisor or mechanic, but if they could not be contacted, then someone from the HW area on surface would be sent.

Mine: Service Hoist

1. Cage tender is responsible for the operation of the service conveyance.
2. Cage tender to hoist injured persons to surface first.
3. Cage tender to begin hoisting remainder of underground personnel beginning with lowest station level.
4. Service hoist to be loaded in an orderly manner with maximum of 32 persons per trip.
5. A Supervisor is to remain at the station level until all persons have been evacuated from the station level.
6. Cage tender will direct all persons to report to the H.W Mine lamp room upon arrival on surface.
7. When all station levels have been cleared of all persons, the Cage tender will notify the Hoist Operator and the service hoist is to be released.
8. Cage tender is to stand by and await further instructions.

Mine: Shaft (Travel only if shaft is clear)

1. Notify Hoist Operator of route of evacuation via shaft ladder system.
2. Do not attempt to carry items. Leave on station level.
3. Climb carefully and slowly using the 3 point contact method. Ladders are wet and slippery.
4. Stop and rest on landing areas. Allow others to pass.
5. Once on surface, immediately report to the H-W Mine lamp room.

Mine: 2000 Level Escape Way (Travel only if escape way is clear)

1. Follow escape route signs to 2000 Level Escape way.
2. Notify Hoist Operator of route of evacuation via Escape way.
3. Climb carefully and slowly using the 3 point contact method.
4. Stop and rest on landings. Allow others to pass.
5. Follow escape route signs at top of Escape way to 1300 Level of the Myra Mine.
6. Once on surface immediately report to the H.W Mine line-up room.
7. If route to surface is blocked return to telephone at transformer station and notify Hoist Operator of route of evacuation via Price Portal.
8. Direct other persons and follow escape route signs to Price Portal.
9. Key for portal exit gate is located on timber set.
10. Wait for transportation to H-W Mine line-up room.

Mine: 1800 Level Escape Way (Travel only if escape way is clear)

1. Follow escape route signs to 1800 FAN ROOM Escape way.
2. Notify Hoist Operator of route of evacuation via Escape way.
3. Climb carefully and slowly using the 3 point contact method.
4. Stop and rest on landings. Allow others to pass.
5. Follow escape route signs at top of Escape way to 14 level of the LYNX Mine, to the shaft, up the shaft man way to 10 level and out to the west portal.
6. Once on surface immediately report to the H.W Mine line-up room.
7. If route to surface is blocked return to telephone at stations and notify Hoist Operator of route of evacuation.
8. Wait for transportation to H-W Mine line-up room.

Mine: Production Hoist

1. Cage tender will be responsible for the operation of skip conveyance during evacuation.
2. Cage tender will notify Hoist Operator when hoisting via skip conveyance will begin.
3. Hoist Operator will operate production hoist at 1/4 speed.
4. Cage tender to hoist injured persons to surface first.
5. Cage tender to begin hoisting remainder of underground personnel beginning with lowest station level.
6. Skip conveyance to be loaded with maximum of 6 persons per trip.
7. A Supervisor is to remain at the station level until all personnel have been evacuated from the station level.
8. No gear is to be taken on the skip conveyance.
9. Cage tender will direct all persons to report to the H-W Mine line-up room upon arrival on surface.
10. When all station levels have been cleared of all persons, the Cage tender will notify the Hoist Operator and the skip conveyance will be released.
11. Cage tender is to stand by and await further instructions.

Mine: 2100 Shop

1. Activate the Warning System located in your particular bay.
2. Take the nearest fire extinguisher and put out the fire.
3. If the fire is out of control:
   - If upwind of the fire, exit to the nearest refuge station.
   - If downwind of the fire, exit out the back and around through the mandoors. Ensure mandoors are left as found. Proceed via 403 ramp to 20-371 Refuge Station.
4. Warn everyone that you meet, including the people working in the warehouse.
5. Phone Ext. # 555 giving details as soon as possible.
6. From this point, follow the "REFUGE STATION PROCEDURE".

Mine: 1800 Old Shop

1. Take the nearest fire extinguisher and put out the fire.
2. If the fire is out of control:
   a) Exit the shop immediately if on exit side of fire, warning everyone that you meet.
   b) Push the red button labeled "Fire Suppression System" on the box outside the refuge station.
   c) If between the fire and that Refuge Station then enter that Refuge Station
   d) The fire alarms will sound for 90 seconds, the shop fire door will close and the power to the shop will switch off automatically.
3. Phone Ext. # 555 giving details of fire as soon as possible.
4. Follow Refuge Station Procedures.

Mine: 1800 New Shop

1. Take the nearest fire extinguisher and put out the fire.
2. If the fire is out of control:
   - If on exit side of fire exit the shop immediately warning everyone that you meet and proceed to the Old Shop Refuge Station.
   - Push the red button labeled "Fire Suppression System" on the box outside the refuge station.
   - If between the fire and that Refuge Station then enter that Refuge Station
3. Phone Ext. # 555 giving details of fire as soon as possible.
4. Follow Refuge Station Procedures.

Mill

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the Staff House.
3. Stay calm, do not run - walk.
4. Close your office door on way out to indicate office is empty
5. Warn others in the vicinity and on route of travel to Assembly Area.
6. Senior Metallurgist or his designate to check the Conference Room and washroom when exiting.
7. Stay at Staff House and await further instructions.
8. Control Room operator is to remain in the Control Room provided he is in no immediate danger or has been instructed otherwise.

Camp Bunkhouses and Cookhouse

IF ALARM SOUNDS:

1. Feel the exit door; if hot, do not open and instead…
2. Leave room by way of window. If possible, shut window after leaving.
3. Do not attempt to take belongings.
4. Proceed the safest way to the Staff House.
5. Stay calm, do not run - walk.
6. If you are able to evacuate via door, warn others in the vicinity and along route of travel to Assembly Area.
7. Stay at Assembly Area and await further instructions.

Staffhouse

IF ALARM SOUNDS:

1. Feel the exit door; if hot, do not open and instead…
2. Leave room by way of window. If possible, shut window after leaving.
3. Do not attempt to take belongings.
4. Proceed the safest way to the Rec. Hall.
5. Stay calm, do not run - walk.
6. If you are able to evacuate via door, warn others in the vicinity and along route of travel to Assembly Area.
7. Stay at Assembly Area and await further instructions.

H-W Maintenance Shop/Warehouse

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the H-W training centre.
3. Stay calm, do not run - walk.
4. Warn others in the vicinity and on route of travel to Assembly Area.
5. Stay at H-W training centre and await further instructions.

Administration Building

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the H-W training centre.
3. Stay calm, do not run - walk.
4. Close your office door on way out to indicate office is empty
5. Warn others in the vicinity and on route of travel to Assembly Area.
6. Finance Manager or his designate to check the Conference Room when exiting.
7. Chief Geologist to check washrooms while exiting.
8. Human Resources Manager to check downstairs washrooms while exiting.
9. The following people or their Designates will man the Admin Building Doors
   - First Aid at the Main Door
   - Finance Manager outside front door to second floor
   - Human Resources Manager at the HR Main Entrance
   - Mine Captain at the rear entrance
   - Mine Captain will flag off Misc. doors “Do Not Enter” with flagging tape from the Mine Rescue Room
10. Stay at training centre and await further instructions.

Assay Lab

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the Staff House.
3. Stay calm, do not run - walk.
4. Warn others in the vicinity and on route of travel to Assembly Area.
5. Stay at Staff House and await further instructions.

Powerhouse

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the Staff House.
3. Stay calm, do not run - walk.
4. Warn others in the vicinity and on route of travel to Assembly Area.
5. Stay at Staff House and await further instructions.

Discovery Terminal

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to one of the following Assembly Areas.
   - Terminal shop
   - Terminal Trailer
3. Stay calm, do not run - walk.
4. Warn others in the vicinity and on route of travel to Assembly Area.
5. Stay at Assembly Area and await further instructions.

Paste Plant

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the Staff House.
3. Stay calm, do not run - walk.
4. Warn others in the vicinity and on route of travel to Assembly Area.
5. Stay at Staff House and await further instructions.

Lynx Building

IF ALARM SOUNDS:

1. Stop work immediately.
2. Leave workplace and proceed the safest way to the Staff House.
3. Stay calm, do not run - walk.
4. Close office door on way out to indicate office is empty
5. Warn others in the vicinity and on route of travel to Assembly Area.
6. Environmental Manager to check washroom when exiting.
7. Stay at Staff House and await further instructions.

7.0 Emergency Response Equipment and Locations

Location Acronyms:

MRR = Mine Rescue Room
FH = Fire Hall
EV = Emergency Vehicle
WHSE = Warehouse

On-Site Emergency Response Equipment:

Mine Rescue Team Equipment List	Quantity	Location
BG – 4	12	MRR
OXYBOKS K	6	MRR
Safety flame lamps	1	MRR
RZ - 25 tester	2	MRR
Draeger Emergency Escape Unit 5 min duration ALE Lite	1	MRR
5/8"rope	600 ft	MRR
1/2" rope	500 ft	MRR
Fritzwright harnesses	4	MRR
Caribiners small	16	MRR
Caribiners large seaffel type	8	MRR
Figure 8's with ears	6	MRR
Large knot passing pulley	2	MRR
Small pulleys	8	MRR
8 mm prussic rope	200 ft	MRR
Fall arrest harnesses	2	MRR
Tubular webbing	100 ft	MRR
Descender	1	MRR
Edge rope protector	1	MRR
Stretcher spiders	2	MRR

Mine Rescue Equipment Box List (in Mine Rescue Room)	Quantity	Location
12 Ton hydraulic jack	1	MRR
Chain block	1	MRR
2 x 4 wooden blocking		
4 x 4 wooden blocking		
Wooden wedges		
Air bag c/w fittings		
Come-along	1	MRR
Nylon rope	100 ft	MRR
6 ft safety lanyards	2	MRR
Raise chain	1	MRR
Axe	1	
Swede saw	1	
Hacksaw and blades	1	
Grub hoe	1	
Shovel	1	
Pick	1	
Sledge hammer	1	
12" crescent	1	
Pipe wrench	1	

U/G Emergency Vehicle Equipment List	Quantity	Location
(Note: Emergency Boxes at 18 – 195, 2100 Shop, 23 – 338 and 2400 Haulage Level has the same equipment as listed below except no Compressed Air Bottle and Regulator for the Lifting Bags but does have an airline adapter)		
12 Ton hydraulic jack	1	EV
Chain block	1	EV
2 x 4 wooden blocking	1	EV
4 x 4 wooden blocking	1	EV
Wooden wedges	1	EV
Air bag assembly c/w fittings	1	EV
Come-along	1	EV
6 ft safety lanyards	2	EV
Raise chain	2	
Axe, Swede saw	1	EV
Hacksaw and blades	1	EV
Grub hoe	1	EV

Shovel & Pick	1	
Sledge hammer	1	EV
12" crescent	1	EV
Pipe wrench	1	EV

First Aid Stretcher Box Equipment List	Quantity	Location
Basket stretcher	1	n/a
Spine board	1	n/a
First aid kit	1	n/a
Splint set	1	n/a
Blankets	2	n/a

Location of First Aid Stretcher Boxes	Quantity	Location
H-W MINE:	1	n/a
18-155 Refuge Station	1	n/a
18-195 Shop	1	n/a
18 Level Old Shop	1	n/a
18 Level New Shop	1	n/a
18 Level 244-refuge station	1	n/a
18 Level 173-refuge station	1	n/a
20 Level 316-refuge station	1	n/a
20 Level 371-refuge station	1	n/a
21 Level Mechanic Shop	1	n/a
21-329-efuge station	1	n/a
23 338-refuge station	1	n/a
23 K330-refuge station	1	n/a
23 325-refuge station	1	n/a
23 370-Refuge station	1	n/a
23 431-Refuge station	1	n/a
24 Level Main refuge station	1	n/a
24 Level 332-refuge station	1	n/a
24 Level 339-refuge station	1	n/a
25 Level refuge station	1	n/a
26 Level refuge station	1	n/a
Shaft Stations	1	n/a
Mill:	1	n/a
Flotation Floor - next to stairway to Mill Control Room	1	n/a

Fire Brigade Equipment List	Quantity	Location
FIRE TRUCK:	1	FH
Turn out coats and pants	12	FH
Sets of boots	12	FH
Sets of gloves	12	FH
Helmets	12	FH
S.C.B.A.	7	FH
Spare S.C.B.A. Bottles	6	FH
Axes	2	FH
Prying bar	1	FH
Hooligan tool	1	FH
Sledge hammer	1	FH
Bolt cutter	1	FH
Power saw	1	FH
Tool kit	1	FH
Polaski	1	FH
Hose tools	6	FH
Gated wyes	2	FH
Hydrant wrenches	2	FH
Hose hanging tools	2	FH
Plastic fog nozzles	4	FH
Akron fog nozzles	2	FH
Foam educator and foam	1	FH
Pails of foam - all purpose AFFF	20	FH
Pails of Forestry Foam	12	FH
Gorman rupp pump	1	FH
Gas tank for gorman rupp pump	1	FH
Quart water soluble oil	1	FH
Piercing applicator 95 gpm	1	FH
1 1/2" Double female adapter	2	FH
1 1/2" Double male adapter	2	FH
2 1/2" Female to 1 1/2" male	2	FH
3" Quick couple female to 1 1/2" male	1	FH
3" Quick couple male to 1 1/2" male	1	FH
3" Quick couple female to female	1	FH
3" Quick couple male to male	1	FH
Foam fan	1	FH

Hydrant House Equipment List	Quantity	Location
Locations: HW building East side, HW building West side, Assay Lab, Power House West side, Paste Plant, Cook House West side, Fuel Pump area, Cone Crusher Building SW side, Lynx Building East side		
Sufficient 2 ½" hose to reach from Hydrant to Building		
100 ft. - 1 1/2 Hose	2	
Fog nozzles	1	
Hydrant wrenches	1	
Universal spanners	2	
2 ½" to double 1 ½" Wye	1	

Forest Fire Equipment List	Quantity	Location
Hayle Float pumps	2	FH
Wawjax mark 3 pumps	2	?
Indian fire pump model 90g	1	FH
Smoke chase collapsible fire pump model 500F3	2	?
Drafting hoses	4	FH
100 ft SF N hose	10	?
Instantaneous nozzles BCFS style	4	FH
Check valves	4	FH
1" water thief	1	?
Forestry hose clamps	2	FH
Picks	5	FH
Polaskis	10	?
Fire pails	3	FH
Assorted rubber gaskets		FH
Fireman axes	8	FH
Long handle spades	4	FH
Short handle spades	4	FH
Long handle square shovels	3	FH
Short handle square shovel	1	FH

Hazardous Material Spill Equipment List @ Fire Bay	Quantity	Location
Set of Material Safety Data Sheets	1	FA Office
Dangerous Goods Initial Emergency Response Guide	1	1998
Set of MFO site plans and maps		

Communications Equipment	Quantity	Location
Hand held radios as needed		

Equipment for Securing the Site	Quantity	Location
Flashers	4	FH
Sets of flares	2	FH
Rolls of "Caution - Do not enter" tape	2	FH
Flash lights 6V hand held	2	FH

Documentation Equipment	Quantity	Location
Myra Falls Spill Report sheets	1	FA Office
Note pad and pen and pencil	1	FA Office
Investigation bag from the First Aid Office	1	FA Office

Absorbent Materials	Quantity	Location
Bags of floor dry	2	FH
Packages of spill pads	2	FH
Packages of spill booms	2	FH
Boxes of Kim towels	2	FH

Neutralisers	Quantity	Location
Spill XC caustics	1	
Spill XS solvents	1	
Spill XA acids	1	

Tools	Quantity	Location
Scoop shovels	2	WHSE
Long handle square shovels	2	WHSE
Long handle spade shovels	2	WHSE
Short handle flat shovels	2	WHSE
Squeegees	2	WHSE
Corn brooms	2	WHSE
Push brooms	2	WHSE

Containers: (See Warehouse)	Quantity	Location
Empty oil cubes	50+	WHSE
Oversized 45 gallon barrels	2	FH
Laidlaw waste bins	6	HW, Cook house, Mill

Personal Protective Equipment:	Quantity	Location
5 Individual containers of:		
Chemical disposable suit	2	
Respirator	1	
Types of cartridges (organic vapour, chemical vapour, ammonia)	3	
Set of goggles	1	
Reflective vest	1	
Pairs of (PVC) gloves	2	
Also under personal protective equipment:		
Fire boots to be used as per individual size		
S.C.B.A. - Located on the Fire Truck and in the Fire Bay		
Disposable coveralls size medium	10	
Disposable coveralls size X-large	10	
Pairs of extra (PVC) gloves	10	
Extra reflective vests	4	
Face shields and hard hats	6	

Hazardous Material Spill Equipment List - Chevron
Available from David T. Facey Ltd. (Chevron)

Environmental Protection Unit Inventory
(Attached to and forming part of the Equipment Custody & Maintenance Agreement)

Location: Campbell River, BC **Custodian:** David T. Facey Ltd.

Trailer
1993 – Saturn 7' x 14' metal, serial No. 2S916B22XPW010248, c/w hitch wheel, electric pigtail, trailer hitch, spare tire and 2 rubber wheel chock blocks.

Sorbents and Booms
4 – 40' Sorbent boom T-270 (10' sections x 8" diameter)
3 – Bags 18" x 18" x 3/16" sorbent pads – 100/bag
2 – 38" x 144' x 3/8" sorbent roll

Port a Tank
1 – 4,500 litre reinforced vinyl liner c/w collapsible tubular steel frame and drain sleeve. New liner July '97

Hatchcones and Accessories
1 – 18" c/w 2" male Camlock, tightening clamp, grounding wires and carrying case
1 – 22' c/w 2" male Camlock, tightening clamp, grounding wires and carrying case
4 – Dome clamps (adjustable for 18" and 22" domes)

Trash Pumps
1 – Edson 117AL – 2" aluminum side inlet pump with Hypalon valves (diaphragm) c/w 2" female on inlet and 2" male on outlet
1 – Edson 116 size 31 carrying board

Hoses
2 – 2" x 20' Arctic suction hose c/w Camlocks

Camlocks and Fittings
1 – 2" x 3" (female x female) Camlock adapter
1 – 2" x 3" (female x male) Camlock adapter
1 – 2" x 4" (female x female) Camlock adapter
1 – 2" x 4" (female x male) Camlock adapter

Personal Protection Equipment (PPE)
4 pr. – 15", steel toed rubber boots: sizes 2 x 10, 1 x 11, and 1 x 12
2 pr. – Steel toed, neoprene chest high wader pants with suspenders: sizes medium and large
4 pr. – PVC coated rain gear jacket & pant sets: 2 medium and 2 large
11 pr. – Gauntlet type, petroleum resistant gloves
6 – Yellow hard hats, c/w adjustable suspension, CSA approved

Personal Protection Equipment (PPE) cont.
4 – Clear lens safety goggles: CSA Z94.3 – 1982
4 – Reflective traffic vests
4 – Respirator face pieces (1 small, 2 medium, 1 large)
8 – Organic vapour filter cartridges
4 pr. – Tyvek coveralls (coated, chemical resistant)
1 – Fall protection harness (Akron) c/w 30' Surety Lifeline
20 pk. – Disposable earplugs

First Aid
10 Man Site (per provincial OH&S requirements)

Fire Response Equipment
1 – 20 lbs. Ansul fire extinguisher (serial # ?, fire type ABC)

Toolbox and Contents
1 – Utility knife
1 – 8" chisel (non-sparking ?)
1 – Non-sparking hammer (on order Nov. 2002)
1 – 8" lineman's pliers and cutter
12 – Screwdrivers – 6 slotted and 6 Phillips
2 – 1 lbs. claw hammers c/w 12" handle
1 – Hack saw c/w spare blade
1 – Roll tie wire – approximately 100'
1 – Justrite No. 8-805 drum plug wrench
2 – Crescent wrenches: 8" and 12"
2 – Pipe wrenches: 18" and 24"
1 – Combination wrench set ¼" – 1 ¼"
1 – Socket set (on order Nov. 2002)
1 – Vice grips (on order Nov. 2002)

Miscellaneous Equipment
2 – Aluminum shovels
2 – Long handled spades
2 – Pitchforks
2 – Garden rakes
1 – Pick
1 – 4 ½ lbs. Mattock c/w 36" handle
1 – 8 lbs. sledge hammer c/w 36" handle
1 – 3 ½ lbs. axe c/w 24" handle
1 – 30" carpenter's wrecking bar
1 – 12 lbs., 51" crowbar
1 – 24" push broom c/w handle
1 – roll 36" x 100' poultry wire mesh
6 – 6' snow fence type metal stakes (are these grounding rods? If so do they have grounding cables?)

Miscellaneous Equipment cont.

1 – 10 lbs. box of wiper rags
3 – 2 cell flashlights for hazardous location – UL & CSA approved
2 – D cell batteries
2 – 10 litre plastic gas can – UL & CSA approved
6 – 12” fluorescent red traffic cones
25 – 5 mil plastic disposable bags
2 – rolls “do not enter” tape – 2” x 150’
2 – 4” x 6’ plastic pipe
1 – ½” x 100’ polypropylene rope
1 – ½” x 200’ polypropylene rope
1 – ¾” x 200’ polypropylene rope
1 – 205 litre (45 gallon) Overpak salvage steel drum c/w snap lid
4 – 48” x 48” Neoprene drain stoppers
1 – 4 litre Plug N’ Dike, powder
1 – Hatchcone practice drum c/w collapsible steel stand
3 – 12” “No Smoking” signs
1 – Airchime air horn (top rusted)
1 – 12” x 5’ red Vidicator windsock
5 – Conical wood plugs – 1” x 4”, 1.5” x 4”, 2” x 4”, 3” x 4” and 4” x 4”
2 – Grounded metal pails (on order Nov. 2002)

8.0 Site Reference Manuals and Maps

8.1 Reference Manuals

1. **British Columbia Mine Rescue Manual – 2008**

   http://www.empr.gov.bc.ca/Mining/HealthandSafety/minerescue/Pages/manual.aspx

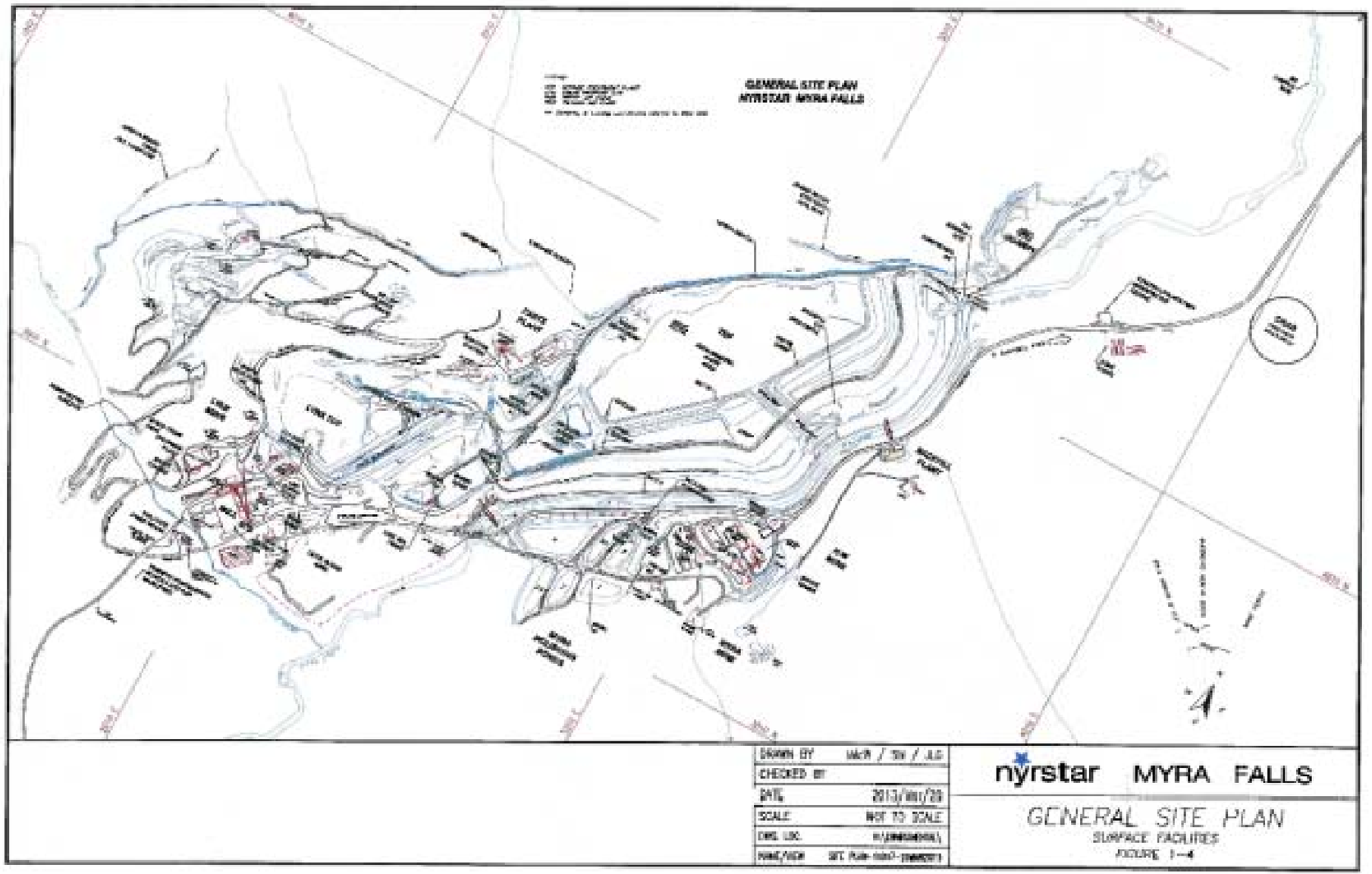
2. **Myra Falls Emergency Management Program Manuals 1, 2, 3 and 4 - 2014**

   Master Copy – Health and Safety Manager Office
   Additional Copies – all members of the Emergency Command Group and their alternates have a current copy of the manual. See EMP Intro section for a list of all individuals in the Command Group.
   Electronic Copy – H:\Environment\ENV OFFICE\Emergency Plans\Emergency Management Plan2013.doc

3. **Nyrstar Myra Falls Ltd. TDF Emergency Preparedness Manual – 2014**

   Master Copy – Environmental Manager Office Bookshelf
   Additional Copies – Safety and Health Manager, Mill and Surface Manager and General Manager
   Electronic Copy – H:\ENV OFFICE\Emergency Plans\Tailings Manuals\TDF Emergency Preparedness Plan 2007.doc

8.2 Site Plan


GENERAL SITE PLAN
MYRSTAR MYRA FALLS
DRAWN BY
CHECKED BY
DATE
SCALE: NOT TO SCALE
nyrstar MYRA FALLS
GENERAL SITE PLAN
SURFACE FACILITIES
FIGURE 1-4

9.0 Critical Incident Stress Management

The Critical Incident Stress Debriefing (CISD) and Defusing process can best be defined as meetings or discussions about a traumatic event or series of traumatic events. They are both solidly based in crisis intervention theory and educational intervention theory.

The CISD and Defusing processes are designed to mitigate the psychological impact of a traumatic event, prevent the subsequent development of post-traumatic syndrome, and serve as an early identification mechanism for individuals who will require professional mental health follow-up after a traumatic event.

Following notification of a Level 3 or Level 4 Crisis, the ECG Chair and / or ECG Coordinator, with the assistance of the Corporate Crisis Coordinator assesses the severity and determines if the Critical Incident Stress Management process is to be initiated.

1. The person in command would alert the CISM team.
2. The team would, in consultation with Senior Management & Emergency Personal determine the appropriate response such as:
    - Organizing defusing session(s) for as many persons involved as possible (this should occur within 8 hours of event).
    - From the defusing session(s), and in consultation with medical health professionals, a decision would be made as to whether a more involved debriefing session or sessions was warranted.

The group listed below has completed both basic and advanced Critical Incident Stress Management training. This team, under the direction of mental health professionals, would be available should a serious or traumatic event occur within our organization.

Name	**Work Phone #**	**Home Phone #**

To be updated

10.0 Media Communications Plan Overview

Role: ECG Communications Coordinator

Refer to Emergency Management Plan Manual 3 – Emergency Communication Plan for more details

Objectives

- Help the news media and key stakeholders focus on known facts and the company's positive actions;
- Demonstrate the company as a caring and responsible organization and;
- Maintain key stakeholders and the parent company's trust and confidence in the operation's ability to effectively manage the emergency.

Communications Strategies

- Be a quick and reliable source of accurate information;
- Actively communicate with and monitor the news media and key stakeholders, and;
- Be an open and responsible company.

Program Elements

1. Refer all media/stakeholder inquiries to designated spokesperson

- Emergency Communications Coordinator to contact Corporate Communication Coordinator
- Emergency Communications Coordinator to confirm designated spokesperson.
- Emergency Communications Coordinator to notify security, reception and employees to direct all media and stakeholder calls to the assistant of the designated spokesperson.
- Assistant of designated spokesperson to log all media and stakeholder inquiries. Under no circumstances should media calls be placed directly to spokesperson unless authorized by spokesperson.
- All investor relations enquiries will be referred to the corporate office.

2. Assessment of Incident

- Emergency communications coordinator to:
  - initiate and monitor local, regional and provincial media and forward all information pertaining to the emergency situation to the emergency response team;
  - monitor all non-media requests and forward all information pertaining to the crisis situation to the emergency response team;
  - prepare emergency communication plan.

3. Prepare Preliminary Statement

- To ensure that initial information about the incident is accurately conveyed to the media and key constituents, the emergency communications coordinator shall draft a preliminary media statement. This will be approved by the Corporate Communications Coordinator.
- Crisis Communications Coordinator to prepare relevant background information to accompany preliminary statement and statement for employees.
- Preliminary statement and background information to be approved by the Crisis Communications Coordinator.

4. Contact Media/Key Constituents

- Prior to the release of the preliminary statement, human resources coordinator to contact families of victims.
- Following approval of the employee statement, statement is disseminated to local employees.
- Following approval and release of the preliminary corporate statement, spokesperson to return phone calls in media phone log as soon as possible.
- Spokesperson(s) to call/send preliminary statement to key constituents concurrent with release of the preliminary statement to the media. These stakeholders may include but are not limited to:
  - elected and non-elected community leaders;
  - government agencies;
  - provincial and national mining associations;
  - neighboring mining companies;

5. Prepare News Release and Background Information

- Mine site emergency communications coordinator will liaise with the Corporate Crisis Communications Coordinator to draft a news release for approval by local and corporate emergency response leaders when there is/are:
  - multiple or serious injuries or fatalities;
  - risks to the environment;
  - risks to the community;
  - evacuation,
  - significant shut downs;
  - significant investor issues and concerns raised by the incident.
- Crisis Communications Coordinator to prepare appropriate background information to distribute to the media either before or concurrent with the distribution of the news release.
- Mine site Emergency Communications Coordinator to liaise with Corporate Crisis Communications Coordinator to manage the dissemination of the news release to the media and employees simultaneously as well as use of the company's existing web-site.

6. Prepare Media Room

- In the event the incident necessitates the holding of a news conference, the emergency communications coordinator shall have a dedicated media room within the operation office or at a nearby off-site location.
- Contact security, reception and the assistant of the designated spokesperson to inform them of the locale for the news conference.

7. Debrief

- Emergency communications coordinator to attend daily debriefing.
- Coordinator to review/discuss:
  - current media interest and focus of questions;
  - correct erroneous information through media monitoring and internet;
  - communication to employees;
  - communication to parent company.

10.1 Telephone Media / Stakeholder Log Sheet

Date: Time:

Name:

Organization:

Location:

Telephone Number:

Fax Number:

Message:

Other Information/Notes:

10.2 Telephone Media/Stakeholder Log Sheet - Follow up

Call Returned By:

Date: Time:

Notes on Interview:

Questions	Nyrstar Myra Falls Ltd. Response

11.0 Emergency Communications Systems

11.1 Satellite Phone Directions

This is an emergency tool to be used in the event all other modes of communication are rendered inoperable. It should be used to contact any / all Corporate and Mine Site Emergency Response personnel as per emergency procedures manual.

Should anyone from outside need to contact the mine site via this phone the number is

011 88 16 51 47 88 42

To receive a call the phone must be powered on, and be in contact with a satellite.

When you receive a call:

- The phone rings.
- You can answer this phone as you would any regular cell phone

To answer the call:

- FIRST, rotate and fully extend the antenna.

To place a call:

1. Turn power on
2. It will scan until it has a signal. Don't panic if this takes a few minutes. If no signal then you may have to change your location (seek more open space)
4. Then you press and hold SEND on keypad.
5. You can then enter the phone number you want to call.

When talking on this phone you must remember there is a few second delay before the person on the other end hears your voice. So you may want to use it as you would a mine radio. Pause when you finish talking, and pause when you think the person on the other end has finished. Or you may wish to use actual traditional radio Jargon @ "OVER" when you complete a call.

11.2 Emergency Notification Procedures for Employees Offsite at the Time of the Emergency

In the event of an emergency it is important to be able to communicate with employees off site in order to keep them advised of the current state at the mine and to let them know whether to remain at home or come to work. For NMF this communication task is made relatively simple because of the PWT bus network and the single road access to the mine site. The following procedure is to be enacted should an emergency arise that makes it necessary to prevent all or a portion of the workforce from coming to the mine site.

- Contact the PWT Dispatch at (250) 203-3733 (or the Main Line at (778) 346-0343)
    - Advise the dispatcher that there is an emergency situation at the mine site and request that they pass on instructions to the bus drivers picking up the next shift. The instructions should be given to the bus drivers to drive their routes as usual but instead of picking up employees they should advise them of the following information:
        - A brief description of what the emergency is (unless there is reason not to)
        - An estimate on how long regular operations may be disrupted
        - Instructions for employees to remain at home and call the sick line for updates (250) 287-9271 ext. 3318
        - The bus drivers should also be given a list of essential personnel that is required to respond to the ongoing emergency or participate in the clean-up. These employees will be allowed to board the buses and proceed to work.
- Dispatch personnel to set up an intercept point at the intersection of the Gold River turnoff to stop personal vehicles, contractors and suppliers on the way to the mine site and pass on the same information that was given to the PWT's Dispatcher.
    - The personnel manning the intercept point should be given the same list of required employees who will be permitted to continue to the mine site while all others are asked to return to Campbell River.
- Sick line phone number for Updates
    - The sick line answering machine message should be changed to acknowledge that there is a situation at Myra Falls and should be updated as new information comes available in order to keep employees informed.

11.3 Mine Rescue Radio Communications Protocols

<protocols to be added>

11.4 Surface Emergency Response Team (SERT) Radio Communications Protocols

<protocols to be added>

12. Emergency Response Forms

- Emergency Initial Response Form
- Reporting Station Form
- Tag-Board Roll-Call Form
- Surface Roll Call Form
- Stench Gas Form

Emergency Initial Response Form

To be completed by the Events Coordinator
To serve as the beginning of the Record of Events

Who Reported the Emergency? _____

What is the Nature of the Emergency? _____

Who is Involved and How Many People are Affected? _____

Where is the Location of the Emergency? _____

Where is the Report Coming From? _____

Is it Serious? ☐ **Or Minor?** ☐

Is there a fire burning? **Yes** ☐ **No** ☐

Do you need assistance? **Yes** ☐ **No** ☐

Specify: _____

_____

Other information (specify): _____

_____

Time of call: _____ AM ☐ PM ☐ **Signature**: _____

Tag Board Procedure

Tag Board Coordinator to be assigned by Mine Coordinator

1. Mine Coordinator to assign someone to man and coordinate the Tag Board and assign additional personnel to contact each refuge station underground.

2. A record of who is contacting the refuge stations is to be kept using the form entitled *Reporting Station Form.*

3. The Tag Board Coordinator is to move all tags to the top of the board and begin the process of moving the tags down as personnel report into the refuge stations.

4. Record the name and payroll number of all tags on the master tag board on the *Tag Board Roll Call Form* on the next page. Submit a copy to the Mine Coordinator as soon as the form is filled out

5. Retain a copy of the Roll Call Form and check off name of all personnel removing tag from tag board

6. **Only the designated Tag-Board Coordinator is to move tags on the Tag Board unless the owner of the Tag is present to remove it himself.**

7. If an employee is present to remove his tag from the board the Tag Board Coordinator is to take the tag from employee, instruct to remain in mine line-up room and await further instructions.

8. Record the name, payroll number and time of all authorised emergency responders placing tags on the master tag board during the emergency situation on their way underground.

9. As employees are accounted for in the Refuge Stations move their tag to the bottom of the board. This will readily show employees that are still not accounted for.

10. Inform the Mine Coordinator in the Emergency Command Centre when all employees have been accounted for or if employees cannot be accounted for.

Reporting Station Procedure

1. Mine Coordinator is to assign personnel to contact designated reporting stations and collect emergency information
2. Provide Control Centre Director with emergency information from designated reporting stations and assembly areas
3. Check with Tag Board Coordinator for personnel not accounted for
4. Report to the Mine Coordinator when all personnel have been accounted for
5. All messages received from designated reporting stations and assembly areas should be written down and read back
6. Periodically contact designated reporting stations for further emergency information
7. Provide the “all clear” signal to personnel at assembly areas when received from Mine Coordinator

Reporting Station Form

Surface

Check Off	Location	Phone Number	Name of Person
	H-W Hoistroom	3253	
	Mill Control Room	3216	
	First Aid Room	3318	
	Terminal	250-286-1714	

Mine

Check Off	Location	Phone Number	Name of Person
	18 L 244 Ref Stn	408	
	18 L Old Shop Ref Stn	438	
	18 L New Shop Ref Stn	415	
	18 L 173 Ref Stn	463	
	20 L 371 Ref Stn	400	
	20 L 316 Ref Stn.	410	
	21 L Shop Ref Stn	431	
	21 – 329 Ref Stn	401	
	23 – 338 Ref Stn	453	
	23 – K330 Ref Stn	445	
	23 – 325 Ref Stn	413	
	23 – 370 Ref Stn	443	
	23 – 431 Ref Stn	453	
	24 L Ref Stn	404	
	24-332 Ref. Stn.	417	
	25 L Ref Stn	405	
	26 L Ref Stn.	406	
	Lynx 10 level Ref Stn.	275	

Tag Board Roll Call Form

To be Completed by Tag-Board Coordinator and given to the Mine Coordinator as soon as it is filled out

Name	Payroll #	Name	Payroll #

Surface Roll Call Procedure

Surface Roll Call Coordinator to be assigned by Surface Coordinator

1. Coordinate with Supervisors to record the name and payroll number of all employees at each Surface Assembly Area
2. Instruct all employees to remain in Assembly Area and await further instructions
3. Check off name of any employee leaving area to assist in emergency
4. Provide Surface Coordinator with names of personnel at assembly point
5. Inform Surface Coordinator of any suspected missing employees
6. Continue to question employees about the whereabouts of any missing person and pass on pertinent information.

Name	Payroll #	Name	Payroll #

Stench Gas Warning Procedure

1. Hoist man to contact beat 4 Supervisor @ ext. # 3322 or Production Supervisor @ ext. # 3361 or 431 or via radio to confirm requirement for stench injection.

2. Pull safety pin and press the red button located at the main fan-monitoring console. This injects stench into the ventilation system at the Gravel Raise, Fresh Air Raise No.1 & No. 2, and at 1800 Level Fresh Air Raise.

3. Manually inject stench into the compressed air system by;
   a) turning stench gas canister valves to fully open position
   b) turning airline valve to fully open position

4. Check surface and 1800 Level low pressure warning indication lights. They should be on at the main fan-monitoring console. If they are not on or the communication failure alarm light is on contact First Aid or cage tender to manually inject stench into the Gravel Raise, Fresh Air Raise No.1 & No. 2, and at Lynx.

5. Ensure Stench Warning System initiated by dispatching personnel to each stench gas location to physically inspecting that each canister fired. If they did not fire then fire them manually.

6. Inform Mine Shifter and Emergency Command Centre that the Stench Warning System was initiated and record the times on the table below

7. Immediately replace empty canisters with fully charged canisters located in the surface warehouse.

8. Inform Emergency Command Centre when systems have been replaced with new canisters

9. Instruct supervisors to blow out compressed air lines with neutralizer when returning to underground after “all clear” signal has been given by Emergency Command Centre

Station	Time Initiated	Time Replaced
H-W Hoistroom		
H-W Gravel Raise		
H-W No. 1 Raise		
H-W No. 2 Raise		
1800 Fresh Air Raise		
Lynx (if required)		
Philips Reach (if required)		

13.0 De-briefing and Review Checklist

1) Ongoing Response
   a) Are there any ongoing response activities?
   b) Are outstanding tasks and activities defined and action plans created?

2) Plan Reviews
   a) Are any major changes required?
   b) Any logistical changes required?

3) Contact Lists
   a) Were contact lists up-to-date?
   b) Do any contacts need to be added to the lists?

4) Crisis Operations Centres
   a) Was the emergency center in a ready state?
   b) Are any additional resources needed for the emergency center and not called out?

5) Training
   a) Was training adequate?

6) Activation and Response
   a) Was activation timely?
   b) Are risk assessments up-to-date?
   c) Were media and stakeholder communications effective?
   d) Were specific contingency protocols effective and comprehensive?