

**CUMBERLAND**  
RESOURCES LTD.

**MEADOWBANK GOLD PROJECT**

**EMERGENCY RESPONSE PLAN**

**JANUARY 2005**

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## **DESCRIPTION OF SUPPORTING DOCUMENTATION**

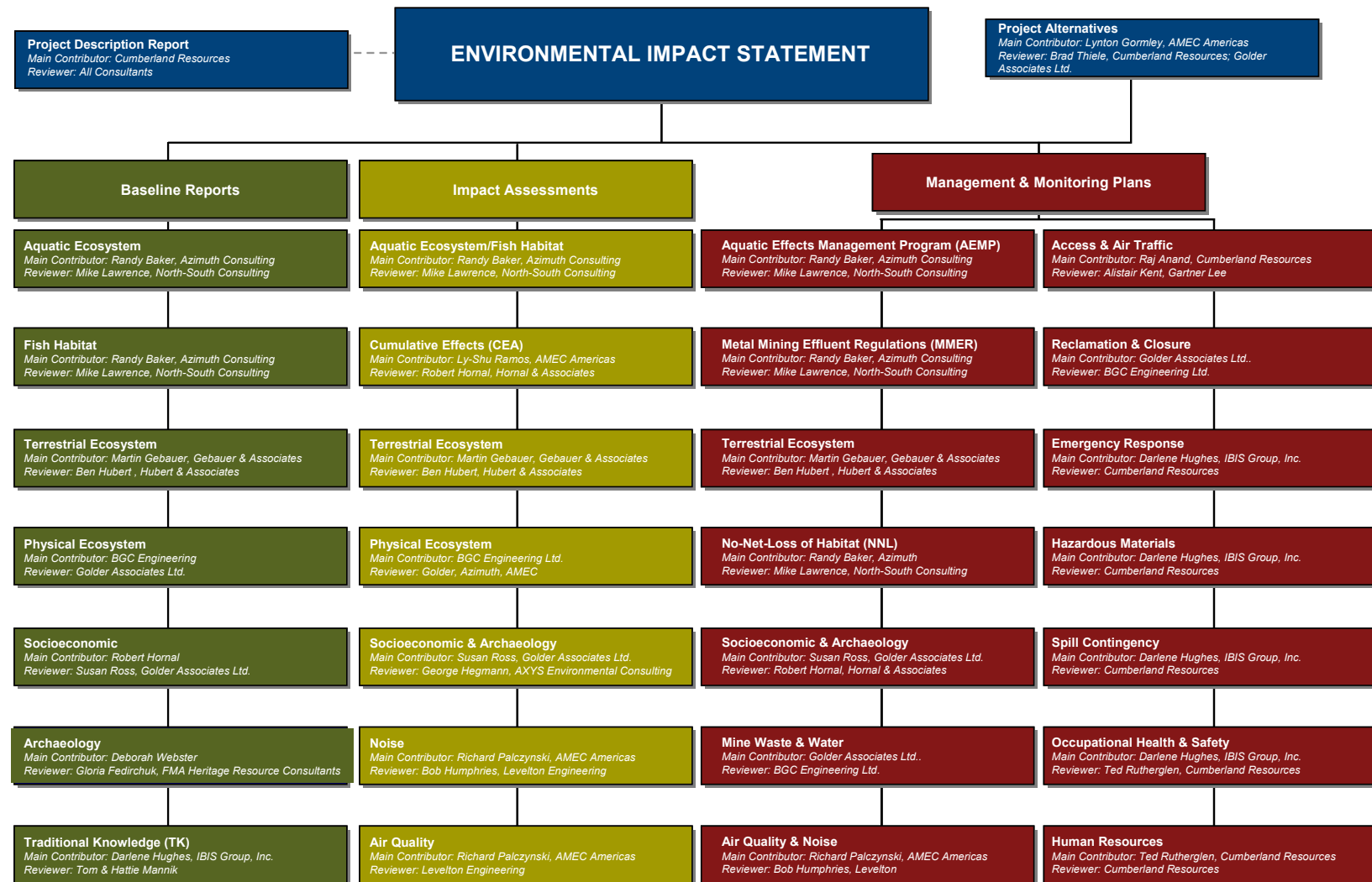
Cumberland Resources Ltd. (Cumberland) is proposing to develop a mine on the Meadowbank property. The property is located in the Kivalliq region approximately 70 km north of the Hamlet of Baker Lake on Inuit-owned surface lands. Cumberland has been actively exploring the Meadowbank area since 1995. Engineering, environmental baseline studies, and community consultations have paralleled these exploration programs and have been integrated to form the basis of current project design.

The Meadowbank project is subject to the environmental review and related licensing and permitting processes established by Part 5 of the Nunavut Land Claims Agreement. To complete an environmental impact assessment (EIA) for the Meadowbank Gold project, Cumberland followed the steps listed below:

1. Determined the VECs (air quality, noise, water quality, surface water quantity and distribution, permafrost, fish populations, fish habitat, ungulates, predatory mammals, small mammals, raptors, waterbirds, and other breeding birds) and VSECs (employment, training and business opportunities; traditional ways of life; individual and community wellness; infrastructure and social services; and sites of heritage significance ) based on discussions with stakeholders, public meetings, traditional knowledge, and the experience of other mines in the north.
2. Conducted baseline studies for each VEC and compared / contrasted the results with the information gained through traditional knowledge studies (see Column 1 on the following page for a list of baseline reports).
3. Used the baseline and traditional knowledge studies to determine the key potential project interactions and impacts for each VEC (see Column 2 for a list of EIA reports).
4. Developed preliminary mitigation strategies for key potential interactions and proposed contingency plans to mitigate unforeseen impacts by applying the precautionary principle (see Column 3 for a list of management plans).
5. Developed long-term monitoring programs to identify residual effects and areas in which mitigation measures are non-compliant and require further refinement. These mitigation and monitoring procedures will be integrated into all stages of project development and will assist in identifying how natural changes in the environment can be distinguished from project-related impacts (monitoring plans are also included in Column 3).
6. Produce and submit an EIS report to NIRB.

As shown on the following page, this report is part of the documentation series that has been produced during this six-stage EIA process.

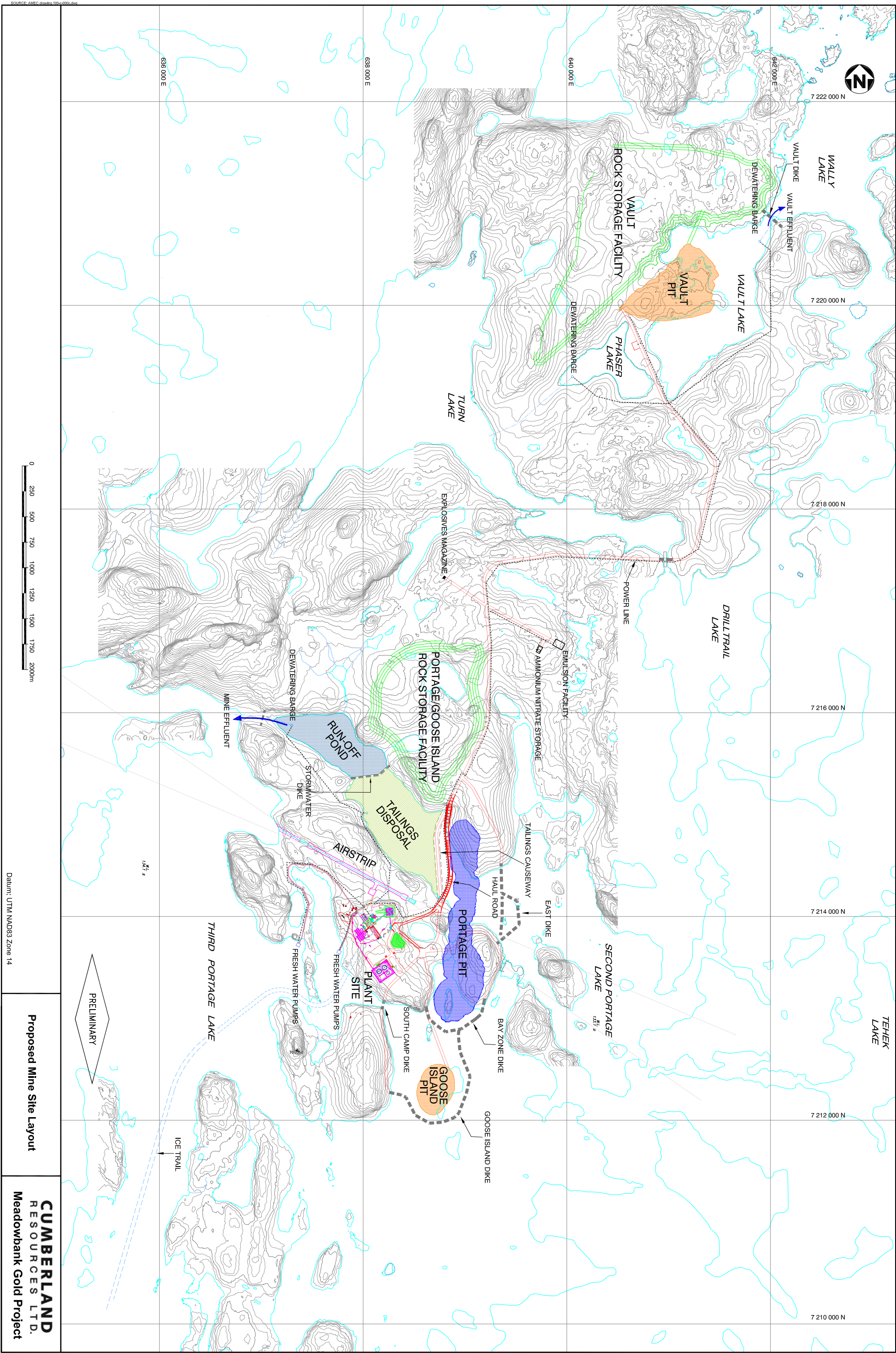
**EIA DOCUMENTATION ORGANIZATION CHART**



**PROJECT LOCATION MAP**







## **SECTION 1 • INTRODUCTION**

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### **1.1 PURPOSE OF THE EMERGENCY RESPONSE PLAN**

Cumberland Resources Ltd. (Cumberland) is proposing the development of the Meadowbank Gold project located approximately 70 km north of the Hamlet of Baker Lake in Nunavut, Canada. This preliminary Emergency Response Plan (ERP) has been prepared for use as a guide in developing a more comprehensive manual, which will inform and instruct employees, contractors, and site visitors how to quickly and efficiently respond to any foreseeable emergency that would likely occur at the Meadowbank project site.

### **1.2 SCOPE OF THE PRELIMINARY EMERGENCY RESPONSE PLAN**

This plan has been prepared by Cumberland to address the requirements for a more comprehensive emergency response plan (ERP) for the Meadowbank project. The final ERP will address gold mining, processing, and related activities at the Meadowbank site. Cumberland will ensure the mining contractor fully understands and complies with all legislated safety standards as well as the policies and procedures outlined in the final ERP before any work commences at the Meadowbank site.

Guiding the development of this document has been the principle that an effective and ERP must provide:

- a clear chain of command for safety and health activities
- accountability for safety and health performance
- well-defined corporate expectations regarding safety and health
- comprehensive hazard prevention and control methods

record-keeping requirements to track program progress.

This ERP is conceptual in nature and will be finalized prior to the beginning of construction activities at the mine. The ERP will be reviewed annually, or more frequently as required, to evaluate its effectiveness and to ensure continual improvement in the procedures. All employees are encouraged to offer suggestions for ways to eliminate potential hazards and improve work procedures.

Cumberland has also developed an "Occupational Health & Safety Plan" (OHSP plan); "Spill Contingency Plan;" and "Hazardous Materials Management Plan" (HMMP). These plans are provided under separate cover.

### **1.3 CUMBERLAND'S POLICY STATEMENT**

Cumberland is committed to protecting the health and safety of all its workers and the environment and to adhering to all legislated safety standards. The necessary resources will be available to respond quickly and efficiently to all emergencies to prevent injury to, or degradation of, the health of



individuals or the environment. In implementing this emergency response policy, Cumberland will set preparedness targets and report its progress on a regular basis.

To this end:

- All relevant safety and emergency response laws and regulations will be incorporated into Cumberland's ERP as minimum standards.
- Senior management is responsible for making funds and other resources available, including hiring and training qualified personnel, to ensure the successful implementation of the ERP in the event of an emergency.
- All supervisors are responsible for ensuring that their employees are aware of, and trained in, the proper emergency response procedures and that procedures and contact information are posted in all work areas. Supervisors are also responsible for ensuring that all employees follow safe work methods and all related regulations to prevent emergencies from occurring (for more information, see Cumberland's OHSP plan).

An emergency response team and coordination centre will be established at the Meadowbank site when the project becomes active.

#### **1.4 POLICY WITH RESPECT TO CONTRACTORS & VISITORS**

Every person working at or visiting the Meadowbank site will be apprised of, and required to follow, the ERP policies and procedures set forth in this manual. For a list of responsibilities, see Section 2.

A pre-hire assessment will be made of all contractors and subcontractors based on hurdles that eliminate companies with a poor safety record and give preference to the selection of "best-in-class" companies based on their safety performance.

Major contractors, such as those for mining and hauling, will be required to have their own emergency response procedures. This will be verified by Cumberland management prior to final engagement of the contractor.

## **SECTION 2 • ORGANIZATION & JOB RESPONSIBILITIES**

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### **2.1 INTERNAL RESOURCES**

#### **2.1.1 All Employees**

All employees are responsible for:

- reporting all emergencies to their supervisor
- calling the emergency phone number or contacting the on-scene coordinator to describe the type, location, and nature of the emergency, including possible injuries or trapped personnel, and the presence of any chemical or explosive hazards.

#### **2.1.2 Supervisor**

The supervisor is responsible for:

- performing a preliminary assessment of the emergency
- notifying the on-scene coordinator of the emergency to provide details regarding the type, location, and nature of the emergency, including possible hazardous materials involved and health and safety concerns

taking roll calls at muster stations to confirm that all employees are present and accounted for in the case of evacuations and immediately notifying the on-scene coordinator if any employee(s) does not report to his or her muster station.

#### **2.1.3 On-Scene Coordinator**

The on-scene coordinator is responsible for:

- assuming overall authority in the emergency (other than medical)
- evaluating the emergency and develop a response plan
- ensuring the safety of all personnel
- activating any required contingency plans
- ensuring that the emergency is reported to appropriate regulatory officials and Meadowbank project personnel
- ensuring all required resources (people, equipment, and materials) are made available
- making arrangements to get additional resources from off-site, if required
- involvement in annual reviews of the ERP with the Occupational Health & Safety Committee (HSC)

providing regulatory agencies, Cumberland, and mine management personnel with information regarding the status of the emergency.

#### **2.1.4 Emergency Response Team**

The site will have an emergency response team (ERT) that will be trained and responsible for fire fighting, controlling spills, and assisting with medical emergencies that may occur at the Meadowbank site. These team members will attend regular training sessions.

#### **2.1.5 Emergency Response Team Coordinator (ERTC)**

The responsibilities of the ERTC are to:

- mobilize all ERT personnel, equipment, and supplies as required to the site of the emergency
- assist in developing and implementing training programs and exercises with the on-scene coordinator, human resources representative, and loss control manager

assist the on-scene coordinator in handling the emergency.

#### **2.1.6 Environmental Advisor**

The following are the responsibilities of the environmental advisor:

- provide technical advice on probable environmental effects resulting from a spill
- provide advice to the on-scene coordinator for appropriate spill response procedures
- be involved in emergency response training exercises
- contribute to the annual review of the ERP with the HSC

assist in developing sampling and testing or monitoring programs of water or soil that has been or may have been directly affected by a spill.

#### **2.1.7 Loss Control Manager**

Cumberland does not have a formal loss control department, but this department is planned once operations commence. The operations manager will ensure that a loss control manager is identified. The loss control manager will be responsible for:

- monitoring contractors' health and safety performance for compliance with applicable legislation and their own safety programs
- ensuring that all new site personnel are properly oriented
- maintaining up-to-date copies of all site procedures and making them available to new personnel
- acting as secretary for the HSC
- performing monthly HSC tours and meetings

- ensuring that the HSC contains representatives from employers, employees, and all major contractors
- ensuring proper and timely documentation/reporting of inspections, investigations, and meetings
- dealing with wildlife issues (such as animals getting into garbage, etc.) in accordance with the mitigation measures set out in the wildlife section of the EIA
- assisting in conducting emergency response exercises, at least semi-annually, with the ERTC and the on-scene coordinator
- sending inspection reports and minutes to the Worker's Compensation Board (WCB) Prevention Services Mines Inspection Group
- contacting external resources to assist in assessing the scope of losses as a result of the emergency, if authorized by the on-scene coordinator

implementing a routine site inspection and recording/reporting program for environmental spills. This program will address all applicable issues in relevant legislation pertaining to chemical handling, storage, labelling, use, reporting, and health and safety requirements.

The loss control manager may require the assistance of outside persons to conduct damage assessments beyond the scope of the capabilities of on-site personnel. The loss control manager, with the assistance of the operations manager, will identify an appropriate resource for damage assessment. When identified, this person or organization will be listed in this ERP.

#### **2.1.8 Operations Manager**

The operations manager is responsible for implementing and maintaining the ERP. In addition, the operations manager's responsibilities are to:

- act as spokesperson on behalf of Cumberland with regulatory agencies, as well as the public or media
- prepare and submit any formal reports (within the required time frame) to regulators and Cumberland management detailing the occurrence of an emergency; this includes submitting an incident reporting form
- co-chair the HSC
- organize regular inspections of emergency response training practices and emergency response equipment
- review the ERP for updates annually with the HSC
- review job descriptions of all positions named in the emergency response plan
- evaluate what training is required by all staff
- ensure that all staff are given appropriate training
- ensure that all staff are retrained as needed

- ensure that the on-scene coordinator has the means (financial and otherwise) to ensure that all required resources are made available, or provided from off-site if required
- ensure that the human resources representative has the means (financial and otherwise) to ensure that all employees' training requirements are current
- ensure that emergency response exercises are conducted at least semi-annually by the loss control manager, the on-scene coordinator, and ERTC
- ensure that this ERP remains up-to-date, and that updated versions are distributed to all the necessary individuals
- ensure that updates to new emergency communications information (new phone numbers, changes in reporting structure, etc.) are distributed as soon as the new information becomes available
- keep a formal record of distribution and amendments to the ERP

ensure that the results of the regular inspections are used to improve emergency response practices, and improve relevant plans accordingly.

#### **2.1.9 Human Resources Representative**

The following are the responsibilities of the human resources (HR) representative:

- maintain emergency and health and safety records
- track all emergency and health and safety training that on-site staff have received, and when retraining will be required
- notify the on-scene coordinator when retraining is required
- ensure that employees are retrained in appropriate emergency response skills, workplace hazardous materials information system (WHMIS) training, HAZCOM, occupational health and safety administration (OHSA) training, first aid, and respirator fit-testing prior to expiry of existing training certification

consult with appropriate organizations regarding retraining requirements and schedules.

#### **2.1.10 Site First Aid**

Physician assistants are responsible for the following:

- providing on-site first aid and other medical support
- providing additional training for ERT members
- ensuring that the first aid room is properly organized and equipped with advanced first aid equipment

ensuring that the first aid room is maintained at all times.



#### **2.1.11 Other Personnel**

Depending on the nature of the emergency (medical, electrical, mechanical, fire, etc.) other site personnel, including the site emergency medical personnel, site electrician, site mechanic, and others, may be called upon to play key roles. The roles and responsibilities of these individuals in the event of an emergency are clearly defined in the various emergency procedures. The camp maintenance personnel are responsible for the following:

- ensuring that smoke detectors and site fire extinguishers are in proper working order
- performing regular inspections of fire warning and firefighting equipment.

#### **2.1.12 Emergency Response Team List & Contact Information**

The members of the emergency/spill response team, their duties, and phone numbers will be compiled prior to construction and will be in effect once the project becomes active. This information will be made available to all necessary personnel and regulators.

### **2.2 EMERGENCY COORDINATION CENTRE**

Emergency operations will be directed out of the emergency coordination centre (ECC) and the incident command centre (ICC). The ECC will be located in a safe, secure place, from where the following will take place:

- key decisions will be made and operations will be managed
- technical information to direct emergency activities will be provided
- a communications centre will be established for emergency operations and to communicate with other organizations
- resource procurement will be provided and resource use will be directed
- any damage will be assessed and long-range objectives and plans will be developed

information on the emergency will be stored and disseminated to all necessary internal and external parties.

Available at the centre will be the following information:

- shutdown procedures for operations
- locations of hazardous material storage areas
- locations of emergency and safety equipment
- maps of communities and environmental maps
- information on location of other communications equipment, including portable sets
- information on emergency power
- contacts for other utilities

- operating manuals
  - MSDS sheets
  - list of personnel with alternate skills for use in emergencies
  - type and location of alarm systems
  - accident report forms
  - accident status board and log book
  - copies of emergency response plan, media and communications plan, specific action plans
- notification lists, staff lists, contact lists, with regular and emergency telephone/pages numbers, etc.

The ICC will be located at a safe and secure place near the site of the emergency. All responses and mitigation efforts developed at the ECC will be implemented through the ICC.

In the event of an emergency, security personnel may be required to establish and maintain a security perimeter to prevent or minimize injury to personnel; to preserve evidence for investigation; or to prevent unauthorized access to the scene.

## **2.3 TRAINING**

The HR representative is responsible for documenting, tracking, and updating all training activities in accordance with training requirements outlined in the site EMS. For mine operations, Cumberland will ensure a sufficient number of trained ERT team members are on site at all times. All members of the ERT will be trained and familiar with emergency and spill response resources. Emergency training will be conducted annually to ensure that a sufficient number of team members are available and that their training is up-to-date. The following will be included in the training:

- a review of the spill response plan and responsibilities of the team members
- the nature, status, and location of fuel and chemical storage facilities
- the location of on-site and off-site spill response equipment, and how to use it
- emergency contact lists
- desktop exercises of “worst case” scenarios

the likely causes and possible effects of spills.

All employees will be provided with standard first aid training, which will be updated annually. Records of first aid training and updating requirements will be the responsibility of the HR representative. All first aid instructors will have appropriate certification. All instructors will be highly qualified in emergency response and prevention methods.

All personnel and contractors at the project site are familiar with emergency reporting requirements. This will be maintained by ensuring that all contractors and new personnel attend an orientation and training program on initial emergency response procedures. Attendance will be tracked on site by the HR representative and retraining will occur annually.

Fuel handling crews will be fully trained in safe operation procedures, spill prevention techniques, and initial spill and emergency response. Staff working with the process and wastewater systems will also be trained in safe operation procedures. Retraining of these crews will occur annually and will be tracked on site by a HR representative. Training programs will include regular WHMIS and transportation of dangerous goods (TDG) training for all employees that use, or are responsible for, chemicals on site. WHMIS and TDG training will be provided by a certified trainer.

Additional safe chemical handling training will be conducted for employees handling or working in the vicinity of dangerous chemicals such as hydrofluoric acid, nitric acid, explosives, and fuels. Training completion dates will be tracked by the HR representative and retraining will occur annually; retraining for TDG will be completed every three years. Employee TDG training status will be tracked by on-site HR personnel so that retraining can occur before previous TDG training certification has expired.

OSHA or Mine Safety and Health Administration (MSHA) health and safety training will occur for all new employees that will be handling, or responsible for, chemicals. Annual refresher courses will also be provided. Dates of course attendance will be tracked so that refresher courses can be offered before previous certification is expired. Certified trainers will provide the OSHA or MSHA training.

International Air Transport Association (IATA) training for will be provided to all individuals responsible for shipping and receiving materials by air. This training will be provided by qualified instructors. Training completion and retraining will be documented and tracked by the HR representative. The HR representative will retain records of current training, certification expiry dates, and retraining timelines to ensure that retraining is completed in a timely manner.

## **2.4 EXTERNAL RESOURCES**

### **2.4.1 Legal Council**

The responsibilities of the legal council are to:

- advise the operations manager and environmental manager on the legislative authority of various government agencies
- provide advice on questions of due diligence
- determine costs, fines and liabilities, including penalties associated with regulations

consult with the corporate insurance coordinator and advise the operations manager on insurance matters.

### **2.4.2 Department of Fisheries & Oceans**

The Department of Fisheries and Oceans (DFO) is responsible for protecting watercourse/marine habitat as specified in the *Federal Fisheries Act*. DFO stipulates that there is a “no-net-loss” of habitat policy in place in Nunavut.

#### **2.4.3 Indian & Northern Affairs Canada**

Indian and Northern Affairs Canada (INAC) is responsible for land tenure agreements on Crown land, therefore the activities of waste disposal, open pit mining, road alignment, land reclamation, and closure, as well as sources of borrow materials, fall within their jurisdiction. Resource management officers may conduct inspections for INAC from time to time.

#### **2.4.4 Environment Canada**

Environment Canada enforces the *Canadian Environmental Protection Act* and Section 36 of the *Federal Fisheries Act* through its Environmental Protection Branch. The Canadian Wildlife Service, a division of Environment Canada, governs issues pertaining to wildlife.

#### **2.4.5 Local Water Board**

Water licenses will be issued according to the Acts and Regulations governing the project area. These licenses govern limits of water use, sources of water use, effluent discharge limits, monitoring and reporting requirements. Inspections by water license inspectors are conducted from time to time.

#### **2.4.6 Department of Resources, Wildlife & Economic Development**

The Department of Resources, Wildlife, and Economic Development (RWED) is responsible for ensuring that spill contingency planning and reporting regulations are enforced as outlined in the Environmental Protection Act. Cleanup orders for spills are issued from RWED.

### **SECTION 3 • EMERGENCY RESPONSE EQUIPMENT**

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The site ERTC will ensure that site drawings and equipment lists are posted conspicuously in key locations throughout the site so that important information is always readily available. This will include the following:

- location and isolation points of energy sources
- location of emergency equipment (e.g., fire water pumps, fire extinguishers, monitors, self-contained breathing apparatus)
- emergency procedures outlines, such as specialist firefighting, chemical neutralization
- location of equipment for combating pollution (e.g., booms, skimmers, pumps, absorbents, dispersants)
- availability of internal and external emergency medical support (e.g., hospitals, clinics, ambulances, medical supplies, personnel with medical or first aid training)
- location of toxicity testing facilities (e.g., gas and water)
- location of wind direction / speed indicators
- directions on how to contact the local or regional weather forecasting service

location of personal protective equipment and directions on its proper use.

The operations manager, on-scene coordinator, ERTC, and loss control manager will know where, throughout the project site, all of this information is posted and where emergency equipment is stored. These individuals will also be trained in the proper use of emergency equipment.

External emergency response equipment includes the mobile emergency response equipment described in Cumberland's "Spill Contingency Plan."



## **SECTION 4 • COMMUNICATION SYSTEMS**

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The primary basis for communication will be the phone system; back-up communication will be available via satellite. For on-site communication, hand-held radios will be mandatory for all employees working or travelling in remote areas from the main camp. Back-up power sources and replacement batteries for communications equipment will be available to provide continuous, uninterrupted operation either at fixed facilities or at emergency sites.

Key site personnel will be accessible at all times by either portable radios, radios in vehicles, or office radios. The physician assistant will carry a hand-held radio and monitor the emergency channel twenty-four hours per day. Senior management personnel will rotate as “on-call managers” for after-hour emergencies. A notice will be posted weekly providing the name and room number of the person on call. An accommodations list that highlights key personnel will be posted and updated as required.

Lists of employees trained in first aid, mine rescue, and emergency response members will also be posted. Employees and contractors who will be on site for extended periods will be trained initially and then retrained annually. This training will include: the locations and use of emergency equipment; terminology used; and who needs to be contacted immediately in the event of an emergency.

A procedure for emergency communications will be developed at a later date that will describe the proper use of these components.

## **SECTION 5 • EMERGENCY SCENARIOS**

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This section identifies possible emergency scenarios and outlines the proper response to each situation.

### **5.1 FIRE**

Fires may occur in any area within the surface facilities on-site. It is the responsibility of the fire safety coordinator to ensure that emergency fire and evacuation procedures are developed and maintained for the different fire scenarios that may occur. These will include, but are not limited to, the following:

- the process plant
- the security office
- the maintenance areas
- the helicopter pad/fuel storage area
- the airstrip and associated facilities
- the tank farm
- the accommodations/office complexes

explosives storage, mixing, and supply areas.

The operations manager will ensure that these procedures or plans are kept current as facilities change or expand, or as chemical use changes. The operations manager will also ensure that training in emergency response procedures occurs at least four times per year, and that records of these training exercises are retained for a period of no less than two years. The results of these exercises will be used to refine the procedures, where necessary, to minimize response time and maximize employee safety.

The fire procedures and plans will, at a minimum, include the following:

- an up-to-date general site plan
- plans showing fire escape routes as appropriate (any escape route plans will be prominently posted in the immediate working areas)
- a camp plan showing room numbers
- an accommodations list highlighting, for example, the key site personnel ERT, the physician assistant, and the first aid room
- building floor plans showing fire extinguisher and other fire fighting equipment locations for all site buildings and facilities (including contractor buildings)
- the locations of spill kits and other spill cleanup equipment/supplies
- the locations of emergency first aid supplies and equipment

- up-to-date development plans for the underground excavation
- roles and responsibilities for all applicable employees, with a chain-of-command clearly stated
- a plan of action
- a follow-up reporting and documentation process

a tracking system to ensure that the procedure is up-to-date, and to ensure that the most current document is being used by personnel.

An up-to-date Fire Prevention and Fire Response Plan will be maintained and prominently displayed in the camp as well as the process plant buildings.

All mobile equipment (pickup truck size and larger) will be equipped with either a built-in fire suppression system or appropriately sized hand-held fire extinguishers mounted in a readily accessible location.

The camp complex and the process plant will be equipped with a fire detection and audible fire warning system. All site operating personnel will receive basic training in the use of fire extinguishers. A firefighting plan will be in place and the ERT will practice biweekly.

In the event of a fire, all personnel not directly involved with fighting the fire will report to the designated muster location so attendance can be taken. Personnel will remain in this area until assigned other duties by the ERT or until given clearance that the emergency is over. A Fire and Evacuation Procedure for the Meadowbank camp complex, and Emergency and Fire Evacuation Procedures for the process plant and security offices will be available.

### **5.1.1 Prevention & Response**

The fire safety coordinator will ensure that a fire prevention plan is developed. This plan will:

- include roles and responsibilities of personnel involved in fire prevention
- ensure that records obtained from previous fire reports and training exercises are used to determine areas for improvement
- address the requirements of territorial and federal fire codes at all site facilities regarding fire prevention
- identify all sources of combustion or sparks and ensure that procedures are in place to eliminate “fuel” from being stored in the vicinity of these combustion sources—these include smoking policies and “hot work” procedures
- be tracked through document control processes developed in the EMS to ensure that the most recent version is available

be audited to ensure that the procedures and activities described in the plan are being carried out.

This will be conducted in accordance with the monitoring and measurement section of the EMS.

The ERTC currently assumes the dual role of fire safety coordinator. In future stages of operations, these roles will be separated. This person will be responsible to consolidate and maintain a Site Fire

Response Plan. This plan will include instructions for all personnel in the event of a fire, designated muster areas, designation and duties of various emergency response personnel, coordination of fire training, and drills, as well as maintenance of all plans, records, and logs relating to fire prevention and response. Adequate numbers of fire extinguishers and other fire control systems will be available and checked monthly by the camp maintenance staff. A log of the inspections will be kept. Large-capacity wheeled fire extinguishers will be located near high-risk areas such as the generator facilities, the camp kitchen, tank farm fuel distribution module, and the mine contractor generators. ERT firefighting equipment will be in one location. Equipment such as fire pumps and hoses will be located on board a dedicated vehicle that will be used only for emergencies.

### **5.1.2 Surface Fire**

The camp complex and process plant will be equipped with a fire detection and audible fire warning system. All site operating personnel will receive basic training in the use of fire extinguishers. This training will be tracked by the HR representative, and retraining will occur annually. A fire fighting plan will be in place and the ERT will practice bi-weekly. These practices will be tracked, and records will be kept by the HR representative in accordance with the requirements of the monitoring and measurement section of the site EMS. For any situation involving fires, the first action will be to extinguish the fire if it is safe to do so and then report the incident. If the person cannot safely put out the fire, it must be reported as quickly as possible.

In the event of a fire alarm, all employees not directly involved with fighting the fire will report to the designated muster location. Attendance will be taken to account for all personnel. Employees will remain in this area until assigned other duties by the ERT or until given clearance that the emergency is over.

Incident reports are to be filed detailing the causes and responses of the fires. This information will be used by the fire safety coordinator in subsequent fire prevention activities, in accordance with the monitoring and measurement section of the site EMS.

## **5.2 SERIOUS INJURIES**

In the event of serious injury, it may be necessary to remove the individual from the source of the danger and to administer emergency first aid. The on-site physician assistant will be notified immediately in order to take charge of the situation and ensure the safe removal of the injured person to the first aid room if possible. If required, the physician assistant will make immediate contact with the closest hospital to await instructions and initiate an emergency evacuation.

As soon as steps have been implemented to properly attend to the injuries, the coordinator will notify the appropriate authorities of the accident by telephone, providing as much information as possible. A complete accident description and investigation form is required to be submitted as soon as possible. The accident description and investigation form will be completed and submitted by the operations manager. Unless some action is required to remove an immediate hazard, the site of any serious accident will be cordoned off and remain unchanged until clearance is received from the appropriate authorities.

### **5.3 TOXIC GAS RELEASES**

A plan and procedure for toxic gas releases will be developed upon finalization of the mine facility plan and chemical use/storage facilities. Potential sources of gas release will be identified, and appropriate safety and environmental measures will be described to mitigate this issue. The plan and procedure will be developed by the coordinator and the ERTC, reviewed by the OHSC, and approved by the operations manager. The documents will be tracked using document control methods identified in the site EMS.

### **5.4 EXPLOSIONS**

A plan and procedure for explosions will be developed upon finalization of the mine facility plan and chemical use/storage facilities. Potential sources of explosions will be identified, and appropriate safety and environmental measures will be described to mitigate this issue. The plan and procedure will be developed by the coordinator and the ERTC for review by the HSC and approval by the operations manager. The documents will be tracked using document control methods identified in the site EMS.

### **5.5 WATER & WILDERNESS INCIDENTS**

All employees will notify their supervisors prior to conducting any wilderness or water work. The supervisors are responsible for ensuring that the employees receive the appropriate training to safely work in these conditions. Whenever anyone has to travel in remote areas outside the main camp, the emphasis is on proper up-front planning and preparation to prevent an incident or minimize the danger in the event of a problem. All employees will ensure that the following up-front preparations are implemented:

- notify your supervisor as to where you will be, how you are travelling, and when you expect to return—the supervisor is responsible for monitoring this and identifying any loss of contact or delay in returning
- dress appropriately
- maintain contact using a two-way radio
- carry 'bear bangers'
- bring basic emergency supplies, including appropriate safety equipment
- travel in pairs when possible (two snowmobiles in winter)

if travelling by snowmobile or boat, make sure basic mechanical spares (tools, drive belt, etc.) are with you.



## **5.6 ACCIDENTS & MALFUNCTIONS**

The following emergencies will be addressed in plans and procedures to be developed after finalization of the site design.

### **5.6.1 Mobile Equipment/Aircraft Incidents**

All mobile equipment or aircraft accidents (whether or not the incident involves an injury) will be investigated by the operations manager, who will in turn generate a report. The report will be delivered to Cumberland management, and applicable federal and/or territorial regulatory bodies, depending on the environments affected by the incidents. If the incident involves personal injuries, it will be dealt with as noted in the serious injuries section of this plan. In all cases, the safety of the rescue personnel and the removal of any victim (under the direction of the physician assistant, if possible) to a safe location is a priority. In the event of a significant aircraft incident, the company owning the aircraft will also be notified as soon as possible.

The coordinator will retain the reports and review them for potential improvements that can be made to existing procedures to prevent further incidents or to improve response activities according to continual improvement processes detailed in the site EMS.

### **5.6.2 Releases from Dams**

An emergency response plan and procedure will be developed to address releases from the dam due to overflows or failures. The procedure will be developed by the coordinator, the ERTC and the loss control manager. The plan and procedure will be reviewed by the OHSC. The procedure will be approved by the operations manager, and maintained by the on-scene coordinator.

### **5.6.3 Power System Failure**

A power system failure plan and procedure will be developed during detailed project design. Specifically, the plan will address, but will not be limited to, back-up power systems, emergency responses to evacuate personnel from the mine if dewatering or ventilation systems fail, and emergency heating and lighting systems. The mine contractor and operations manager will be responsible for development and implementation of this plan and procedure. The plan and procedure will be reviewed by the OHSC. Exercises will be scheduled and conducted by the coordinator at least four times per year to test this emergency procedure. Records will be retained for the coordinator to improve the plan; improvements will be documented and approved by the operations manager.

### **5.6.4 Failure of Fuel Storage or Distribution System**

A plan and procedure will be developed to address the potential of fuel storage or distribution system failures at the site. The plan and procedure will be developed by the on-scene coordinator, the ERTC, and the loss control manager. The plan and procedure will be reviewed by the OHSC. The procedure will be approved by the operations manager and maintained by the on-scene coordinator.

The procedure will be tested during exercises conducted by the coordinator at least four times per year. Improvements may be made to the procedure or plan upon approval by the operations manager.

in accordance with the records, monitoring and measurement, and continual improvement processes detailed in the site EMS.

#### **5.6.5 Failure of Water Treatment System**

Failure of the water treatment system will be addressed by a plan and procedure to be developed by the on-scene coordinator, ERTC, and loss control manager. The plan and procedure will be reviewed by the OHSC.

The procedure will be approved by the operations manager and maintained by the on-scene coordinator. The plan and procedure will require the development of a protocol for the storage of untreated water in the water management pond until the treatment system can be brought back into service. Timelines for repairs and storage capacities of this water management pond would be detailed in this plan and procedure, if applicable.

## **SECTION 6 • INITIAL ACTIONS FOR EMERGENCIES**

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### **6.1 ON-SITE EMERGENCIES**

In the event of an emergency, the employee who first notices the event will immediately notify his or her supervisor and provide details regarding the type of emergency and its location. The supervisor responding to the emergency notification will:

- quickly assess the emergency
- notify the coordinator of the emergency and provide details regarding the type of emergency, location, possible hazardous materials involved, and health and safety concerns
- notify all employees in the immediate area of the emergency

be prepared to evacuate employees if necessary.

The coordinator will assess the emergency to determine if it can be handled readily by staff and resources in the area or whether a specialized emergency response team (ERT) is necessary. If the emergency is minor, the coordinator will follow the level 1 emergency procedure (minor). If the emergency cannot be handled by the staff and available on-site resources, the coordinator will initiate a level 2 emergency procedure (serious). If help is required from outside sources, the coordinator will initiate a level 3 emergency procedure (outside help required). These three emergency designations are explained below.

#### **6.1.1.1 Level 1 Emergency (Minor)**

If the emergency is minor, the coordinator will supervise response activities and control the emergency. Qualified employees will address and control the emergency under the direction of the coordinator.

#### **6.1.1.2 Level 2 Emergency (Serious)**

In the event of a level 2 emergency, the steps outlined below will be followed.

- an emergency response team will be contacted and mobilized to address the emergency
- all supervisors will be contacted by radio by the coordinator to inform them that an emergency has occurred
- if deemed necessary, the coordinator will authorize the sounding of the general alarm and order supervisors to evacuate personnel as necessary
- the coordinator will notify the environmental manager of the emergency and a course of action for the appropriate response to protect the environment will be determined
- the coordinator will notify the loss control manager of the emergency (external resources may be used to assist in assessing the scope of losses).

The coordinator will notify Cumberland and legal council in writing of an emergency. The written report will include all information pertaining to the emergency, from initial call records to all activities carried out to address the emergency. All external parties contacted to assist in the emergency will be noted, and follow-up documentation of cause and future prevention options will be included in the report. The operations manager will review and co-sign the report, which will be delivered within 48 hours of the emergency.

Cumberland management and legal council or their designates will advise the operations manager or assist in informing the public and media, as required.

#### **6.1.1.3 Level 3 Emergency (Outside Help Required)**

For a level 3 emergency, the coordinator will follow the same steps as those outlined in the level 2 emergency action list above, except that the coordinator will follow a specific protocol for contacting the appropriate external resources.

## **6.2 OFF-SITE EMERGENCIES**

Notification of off-site emergencies will be initiated by calling the 24-hour emergency telephone number or by radio on channel. The persons receiving these calls will be trained to handle emergency calls and will document the details of the emergency using an Incident Reporting Form. The call operator will then contact his or her supervisor, who will in turn contact the on-scene coordinator. The coordinator will then follow the procedures outlined above for level 1, 2, or 3 emergencies, as required.

## **6.3 ROAD EMERGENCIES**

A planned 92 km long winter haulage route will begin at the storage compound in Baker Lake and enter the site southeast of the mine facilities. The winter haulage route will be required for use approximately two months of each year; however, up to four months may be available, depending on seasonal conditions.

The road will be improved for additional traffic volumes, and proven road safety rules will be in place and enforced through independent monitoring.

Emergencies occurring on this road outside of the mine site will be handled according to Cumberland's "Spill Contingency Plan" and "Hazardous Materials Management Plan."

## **SECTION 7 • REFERENCES**

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- Northwest Territories Water Board's Guidelines for Contingency Planning;
- Environment Canada's Guidelines for Preparing or Reviewing an Emergency Response Plan for a Canadian Pulp and Paper Mill;
- Environment Canada's Implementing guidelines for Canadian Environmental Protection Act, 1999 Section 199 - authorities for requiring environmental emergency plans; the Government of the Northwest Territories' Spill Contingency Planning and Reporting Regulations; and, the Government of the Northwest Territories' Mine Health and Safety Regulations.
- Canadian Standards Association. 1995. Emergency planning for industry: A national standard for Canada (CAN/CSA-Z731-95). Toronto: Canadian Standards Association.
- Echo Bay Mines Ltd. 2001. Lupin Winter Road Spill Contingency Plan.
- Echo Bay Mines Ltd. 2000. Winter Road Rules and Regulations.
- Environment Canada. 1994. Guidelines for preparing or reviewing an emergency response plan for a Canadian pulp and paper mill. Environmental protection series report EPS 1/PF/2. Renewable Resources Division, Industrial Sectors Branch, Environment Canada.
- Environment Canada. 2001. Implementation guidelines for Canadian Environmental Protection Act, 1999, Section 199 – authorities for requiring environmental emergency plans. Environmental Emergencies Program, Environment Canada.
- GNWT Consolidation of Mine Health and Safety Regulations R-125-95. GNWT Spill Contingency Planning and Reporting Regulations R-068-93.
- NWT Water Board. January 1987. Guidelines for Contingency Planning. Government of the Northwest Territories.