This controlled document will be regularly updated to reflect revisions.

Next scheduled update – March 2018

- Updated Emergency Response Plan (ERP) documents will be bound and distributed to all authorized personnel.

- All Minto Mine personnel must have ERP training and know where to gain access to the document in the event of an emergency.
Authorized Distribution / Location List

Minto Explorations Ltd. – Minto Mine:

Health and Safety Office
ERT Facility
General Manager Office
Mine Manager Office
First Aid Room
Mill Control Room
Mill Water Treatment Plant Control Room (Secondary Control Room)
Tailings Building Control Room (Tertiary Control Room)
Refuge Stations
Muster stations
Emergency Assembly Points (Mill, Assay Lab, Warehouse, Water Treatment Plant lunchrooms)

Capstone Mining Corp

Capstone Mining Corp. Vancouver Office

Community:

Yukon EMS Dispatch Whitehorse
Pelly Nursing Station
Carmacks Nursing Station
Yukon Wildland Fire Management – Carmacks

Government:

Yukon Workers Compensation Health and Safety Board

Primary Partners/On-site Contractors:

Selkirk First Nation – Pelly Crossing
Pelly Construction Site Office
Dyno Nobel Site Office
Nu Way Crushing Office
Sodexo Site Office
Dumas Mining

Contractor Specific Emergency Response Plans Related to Minto Site

Dyno Nobel
Pelly Construction Ltd
# Table of Contents

1. **PURPOSE** ........................................................................................................................................... 1  
2. **DEFINITIONS** ....................................................................................................................................... 1  
   2.1 “Emergency” ........................................................................................................................................... 1  
   2.2 “Serious Injury” and “Serious Accident” ................................................................................................. 1  
   2.3 ERT ......................................................................................................................................................... 2  
3. **MINTO MINE SITE LAYOUT AND MUSTER STATIONS** ....................................................................... 2  
   3.1 Minto Mine Site Layout Jan 2017 ................................................................................................................. 3  
   3.2 Mill and Camp layout with muster stations indicated .............................................................................. 4  
   3.3 Active mine and Underground Mine surface muster locations ............................................................... 5  
4. **INITIAL RESPONSE TO MINTO MINE EMERGENCY** ...................................................................... 6  
   4.1 Code One Protocol ................................................................................................................................. 6  
   4.2 Emergency “Code one” Protocol Flowchart ............................................................................................ 7  
   4.3 Code One Protocol – Directly involved personnel .................................................................................... 8  
   4.4 Code One Protocol – Uninvolved personnel .......................................................................................... 10  
   4.5 Code One Procedure for Control Room Operator ................................................................................... 11  
   4.6 Gas Alarm in the Mill .............................................................................................................................. 12  
   4.7 Alternate Control Rooms ......................................................................................................................... 12  
   4.8 Control Room Procedure for Code One Calls from Underground ......................................................... 13  
   4.9 Mill Fire Alarm Procedures ..................................................................................................................... 14  
   4.10 Fire Alarm in any Production Buildings ................................................................................................. 15  
   4.11 Camp Fire Alarm Procedure .................................................................................................................. 16  
   4.12 Minto Incident Command Structure ..................................................................................................... 17  
   4.13 Emergency Communications Centre .................................................................................................... 18  
   4.14 Emergency Response Staging ............................................................................................................... 19  
   4.15 Incident Accountability ......................................................................................................................... 20  
   4.16 Emergency Response Lockout ............................................................................................................... 21  
   4.17 Communications Lock Out ................................................................................................................... 21  
   4.18 Initial Incident Responsibility Matrix ..................................................................................................... 22  
   4.19 Follow up Responsibility Matrix ......................................................................................................... 23  

continued next page...
5 UNDERGROUND EMERGENCIES
5.1 Underground Emergency – Any person discovering an emergency shall: ........................................ 24
5.2 Underground Emergency - Fire .................................................................................................... 25
5.3 Underground Emergency Evacuation ......................................................................................... 26
5.4 Stench Gas Release .................................................................................................................... 27
5.5 Operation of Stench Gas System .............................................................................................. 27
5.6 Refuge Stations .......................................................................................................................... 28
5.7 Main Ventilation Control in Event of a Fire ............................................................................... 28
6 UNDERGROUND EMERGENCY RESPONSE ........................................................................... 29
6.1 Underground Emergency – System of response ...................................................................... 29
7 EVACUATIONS .......................................................................................................................... 31
7.1 Medical Emergency Evacuations ................................................................................................. 31
7.2 Non-Emergency Medical Transfers ........................................................................................... 32
7.3 Alternate Transportation for Medical Emergencies .................................................................. 32
7.4 Site or Camp Evacuation ............................................................................................................ 33
8 MINE RESCUE .......................................................................................................................... 34
8.1 Onsite Mine Rescue .................................................................................................................. 34
8.2 Mutual Aid .................................................................................................................................. 34
9 UNDERGROUND MINE SAFETY PLANNING ........................................................................ 35
9.1 Mine Safety Plan for Minto Underground .................................................................................. 35
10 OTHER EMERGENCIES REQUIRING A PLANNED RESPONSE ........................................... 36
10.1 Major Power Failure .................................................................................................................. 36
10.2 Underground Mine Ventilation Loss Action Plan .................................................................... 37
10.3 Missing Person Action Plan ....................................................................................................... 38
10.4 Outbreak of Sickness or Gastroenteritis Action Plan ............................................................... 39
10.5 Water Storage Pond Dam ........................................................................................................ 41
10.6 Tailings Management Facilities ............................................................................................... 43

List of Appendices
Appendix A: Emergency Contact Information
Appendix B: Emergency Response and Mine Rescue Personnel
Appendix C: Emergency Response Equipment
Appendix D: Mutual Assistance Agreement for Underground Mine Rescue
1 PURPOSE

Minto Mine’s Emergency Response Plan (ERP) sets out the response protocol in the event of an Emergency, as defined in section 2.1.

It is intended for use as a quick reference guide for managers and supervisors. Incident reporting and investigating are also outlined.

In an emergency situation it is imperative that safety and due diligence are exercised, as well as discretion. The priorities are the protection of Life, Environment and Property – in that order.

It is also noted that the Minto Safety Department has internal Safe Work Practices and formal information specific to defined emergency response equipment and activities. The ERP is a document more utilized by the site population at large and thus does not contain detailed Emergency Responder Directives and Procedures.

2 DEFINITIONS

2.1 “Emergency”

An “Emergency” is defined as any occurrence meeting one or more of the following criteria:

2.1.1 Any “serious injury” or “serious accident” as defined by the Yukon Occupational Health and Safety Act 30 (1).

2.1.2 Any incident requiring first aid or rescue response to the scene, depleting resources to respond to secondary emergency.

2.1.3 Any fire requiring more action than initial suppression deployment.

2.1.4 Landslide, earthquake, avalanche, forest fire or flooding where injury or property damage results or may result.

2.1.5 Major power failure.

2.1.6 Missing person.

2.1.7 Loss of life.


2.2 “Serious Injury” and “Serious Accident”

As defined by the Yukon Occupational Health and Safety Act 30 (1);

“Serious Injury” means:

2.2.1 An injury that results in death,

2.2.2 Fracture of a major bone, including the skull, the spine, the pelvis, or the thighbone,
2.2.3 Amputation other than of a finger or toe,
2.2.4 Loss of sight of an eye,
2.2.5 Internal bleeding,
2.2.6 Full thickness (third degree) burns,
2.2.7 Dysfunction that results from concussion, electrical contact, lack of oxygen, or poisoning, or
2.2.8 An injury that results in paralysis (permanent loss of function);

“Serious Accident” means:

2.2.9 An uncontrolled explosion,
2.2.10 Failure of a safety device on a hoist, hoist mechanism, or hoist rope,
2.2.11 Collapse or upset of a crane,
2.2.12 Collapse or failure of a load-bearing component of a building or structure regardless of whether the building or structure is complete or under construction,
2.2.13 Collapse or failure of a temporary support structure,
2.2.14 An inrush of water in an underground working,
2.2.15 Fire or explosion in an underground working,
2.2.16 Collapse or cave-in, of a trench, excavation wall, underground working, or stockpile,
2.2.17 Accidental release of a controlled product,
2.2.18 Brake failure on mobile equipment that causes a runaway,
2.2.19 Any accident that likely would have caused serious injury but for safety precautions, rescue measures, or chance. (As amended by SY 1988, c.22, s. 5; SY 1989, c. 19, s.6)

2.3 ERT
ERT refers to the Emergency Response Team that is compiled of full time Minto Safety Department Personnel and a compliment of volunteers from across the departments including contractors that are certified in one or more of the following: First Aid, Surface Mine Rescue, Underground Mine Rescue, Hazardous Materials Response NFPA 472, and Industrial Fire Brigade NFPA 1801. There is also a compliment of Advanced First Aid Attendants certified to a minimum of OFA 3/EMR working in coordination with the ERT.

3 MINTO MINE SITE LAYOUT AND MUSTER STATIONS
Figures 3.1 to 3.3 provide a mine site layout and illustrate the locations of the various surface muster locations for surface and underground mine emergencies. More information regarding the use of muster stations is detailed in subsequent sections of the ERP.
3.1 Minto Mine Site Layout Jan 2017
3.2 Mill and Camp layout with muster stations indicated
3.3 Active mine and Underground Mine surface muster locations
4  INITIAL RESPONSE TO MINTO MINE EMERGENCY

All visitors, employees and contractors receive emergency training as part of the Minto Mine orientation package. This training includes protocols in the event of a medical, fire, safety or environmental emergency. This section details the initial emergency protocols that all individuals must follow at the mine in the event of one of the aforementioned emergencies. All references to Minto Mine personnel by position are defaulted to defined designate if position is vacant at the time of emergency.

4.1 Code One Protocol
The “Code One” protocol is almost always the first step in reporting all suspected mine site emergencies, and is a critical tool for timely response by emergency response personnel and ensuring that all other workers at the mine are informed of a potential emergency taking place. Figure 4.2 illustrates the response diagram when an emergency or suspected emergency occurs, and outlines some of the responsibilities for key individuals involved in the emergency response.
4.2 Emergency “Code one” Protocol Flowchart

**Incident**
Injury / Fire / Spill / Other

**Discoverer**
- Call “Code 1, Code 1, Code 1” on existing radio channel
- Call “Code 1, Code 1, Code 1” on emergency channel (Channel 1).
- Await Safety Department response on channel 1

**Medic**
Reply to Discoverer and request the Nature of the Code 1.

*Depending on nature of call, Medic may decide to investigate on scene, prior to initiating Code 1. If so, Medic will advise the Mill Control Operator to standby.*

If Code 1 is warranted, direct Mill Control Room Op to initiate an ERT page-out and call Code 1 on all channels.

Proceed to scene and, if qualified, assume Incident Command. Conduct initial assessment

Designate an Incident Accountability Officer & establish incident accountability, and if required, lockout.

If necessary, ensure that the scene is secured until it is released by YWCHSB / Police / Coroner.

Communicate with ERT Leaders
Request apparatus, as required.

Provide necessary first aid treatment and transfer command, as required.

**Mine Rescue Emergency Response Team (ERT)**
Respond to the Emergency Response Centre and don appropriate PPE, then place accountability tags on appropriate passports.

Captain assumes control of the ERT. Each Team Leader, assumes control of the team on his/her passports.

Captain contacts Incident Commander (IC) by radio for information and instruction.

Captain briefs team on tools and vehicles required.

Team responds to scene as directed by IC. Captain reports to IC for instruction, gives one passport to IC, and performs lockout as required.

*See Appendix F for full Incident Accountability Procedure*

**Health and Safety Superintendent**
Conduct accountability

Proceed to scene to provide Unified Incident Command support.

Notify General Manager and area Manager of involved department to initiate Emergency Communications Centre (ECC).

Request additional assistance and resources as required.
- Equipment needs
- Backup First Aiders
- Yukon EMS Dispatch
- RCMP
- Mine Rescue backup
- Mobile equipment

Provide updates to Control Room.
4.3 Code One Protocol – Directly involved personnel
For critical personnel and those involved in an emergency on surface, the following protocol will be observed.

4.3.1 Any employee witnessing an emergency will call out on their current radio channel “Code 1, Code 1, Code 1” and state their name, the nature and location of the emergency. (In the event of a reported injury, a worker with first aid certification, located near the injury site, could respond directly to the scene to assist).

4.3.2 The employee then immediately changes their radio to Channel 1 (Emergency Channel) and calls out “Code1, Code 1, Code 1” and again states their name as well as the nature and location of the emergency.

4.3.3 The employee remains on Channel 1 for a response from Minto Safety Department Personnel.

4.3.3.1 If underground, follow underground emergency protocols 5.1 and 5.2. The following excerpt details underground Code 1 process as per the underground emergency protocols:

4.3.3.2 - Report the emergency by calling the Control Room Operator (CRO), or by sending another worker to call the CRO on a Polycom phone. Emergency Polycom phones are located at refuge stations.

4.3.3.3 For more detail see section 5.

4.3.4 Minto Safety Department Personnel will confirm with the employee calling the nature and location of the emergency using Channel 1 (Emergency) and request additional information as needed.

4.3.5 Employee will then offer all available information and follow all instructions given to them by Minto Safety Department Personnel.

4.3.6 Depending on nature of call, Minto Safety Department Personnel may decide to investigate on scene, prior to initiating Code 1. If so, Minto Safety Department Personnel will advise the CRO to standby.

4.3.7 If Code 1 is warranted, Minto Safety Department Personnel will direct the CRO to announce "Code 1, Code 1, Code 1" on all radio channels with nature and location of the emergency.

4.3.8 Minto Safety Department Personnel will then direct the CRO to initiate an ERT page-out with nature and location of the emergency.

4.3.9 Critical personnel and/or equipment will proceed to Staging, as per Staging Protocol.

4.3.10 The Minto Safety Department Personnel will respond to the scene and conduct an initial scene assessment and assume Incident Command (IC) of the scene.

4.3.11 IC will be declared on the radio and instructions are given to ERT Captain including staging location. If qualified, the Safety Department Coordinator (Medic) will assume IC. If required to treat patients Command will be transferred to an alternate member of the Health and Safety Department or Mine Rescue Team Captain.
4.3.12 Any transfer of command requires a detailed verbal report of the incident and activities conducted and underway, and a formal communication to all responders and on radio channel 1 that transfer of Command has occurred.

4.3.13 ERT will respond to Emergency Response Centre, don appropriate PPE and contact IC for response and staging instructions. Field ERT members will respond in a safe manner to ERT facility in light vehicles or **supervisors can provide transportation for ERT members without LV access.**

4.3.14 Unified Command Support will be initiated when requested by the IC or the Health and Safety Supervisor.

#### 4.3.14.1 All Department Heads (or designate) will monitor radio channel 1 during Code 1’s in order to hear when they are summoned for Unified Command requirements. They will respond to either the scene or the ECC as requested by the Health and Safety Supervisor. Incidents involving an environmental release will include the Environmental Lead in the Unified Command Support.

4.3.15 Only IC can direct the CRO to broadcast a “Code 1 is clear” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system (ext. 5001), allowing for employees to return to regular work.
4.4 Code One Protocol – Uninvolved personnel
During a Code 1, personnel not involved in the emergency shall observe the following protocol.

4.4.1 Upon hearing a Code 1, all personnel will safely stop work and all equipment must be safely rendered to a down/safe idle condition.

4.4.1.1 Exception: Unless the Crusher and area are involved in the emergency, the crusher loader may continue to operate at a reduced speed, and Crusher Control Operator must reduce pan speed to less than 80%. The Loader Operator must stay in the loader unless it is unsafe to do so, for the sole purpose of feeding the crusher.

4.4.1.2 No maintenance may be performed during a code 1. All other personnel must stay in their designated emergency assembly point.

4.4.2 All vehicles will safely pull over to the side of the road and stay there until an ‘All Clear’ is issued, or unless instructed otherwise by supervisor or departmental preplan.

4.4.2.1 For the sole purpose of mustering or Code 1 communications, at the discretion of the supervisor or departmental preplan, light vehicles, including light underground vehicles, may drive directly to department muster station, or directly to notify and pick up co-worker/employee, then directly to muster station, at 2/3 normal speed. Vehicles mustering must be minimized through ride-sharing and must stay clear of incident scene.

4.4.3 Mill, Warehouse, Assay Lab, Electrical and Water Treatment Plant personnel will report to the control rooms and lunch rooms in their work areas, as an emergency assembly point, while the mill remains operational.

4.4.3.1 Exception: two members of Mill Operations may conduct floor patrol of operating area, for the sole purpose of observing and reporting.

4.4.3.2 No maintenance may be performed during a code 1. All other personnel must stay in their designated emergency assembly point.

4.4.4 Radio silence will be recognized on Channel 1 and any Channel of area of involvement until Code 1 has been cleared, except for the purpose of accountability, which includes supervisors calling workers to Muster Stations, Emergency Assembly Points or Staging Location.

4.4.4.1 Radio silence can be broken for critical communication to IC from any party or to get authorization/permission for alternate radio channel use, from Supervisors.

4.4.5 Only IC can direct the CRO to broadcast a “Code 1 is clear” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system, allowing for employees to return to regular work.
4.5 Code One Procedure for Control Room Operator

4.5.1 When a Code 1 is called, the Control Room Operator (CRO) will listen for Minto Safety Department Personnel to respond to the Code 1 on Channel 1.

4.5.2 Once Minto Safety Department Personnel has confirmed the details of the Code 1, they may direct the CRO to initiate an ERT page-out and then broadcast “Code 1, Code 1, Code1” on simplex/duplex radio channels 5, 7, 8, 14, & 16. It is imperative that the CRO makes clear and controlled announcements.

4.5.3 CRO will also call Code 1 on the Telephone Paging System. To do so, the CRO will pick up the receiver and dial **5001**. One ring will be heard, followed by silence, it is then that the CRO will announce the Code 1 as they would on the radio.

4.5.4 If no reply is heard from Minto Safety Department Personnel, the CRO will activate an ERT page-out; announcing the event and location (if known), e.g.; “Code 1 – medical emergency in kitchen”, and then broadcast “Code1, Code1, Code1” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system. It is imperative that the CRO makes clear and controlled announcements.

4.5.4.1 **Repeat attempt to contact Minto Safety Department Personnel on channel 1. If Minto Safety Department Personnel can't be contacted, notify the ERT Captain that they are to assume the role of Incident Commander.

4.5.5 Contractor Underground (UG) Mine Rescue personnel will be called on radio channel 1 by Minto IC. UG/Contractor Supervisor will initiate the organization of Contractor/UG team to the Emergency Response Centre if deemed necessary by IC.

4.5.6 The CRO will confirm on all channels that the Code 1 has been heard by broadcasting Code 1 a second time on simplex/duplex radio channels 5, 7, 8, 14, & 16, and the telephone paging system.

4.5.7 The CRO will monitor the radios during the Code 1 as emergency crews may use the control room as a communications resource. Emergency contact lists (see appendix A and B) must be at hand in case external resources are required to be contacted.

4.5.8 The CRO will keep an accurate timeline of events and radio communications for the duration of the code 1. This information will be required for the investigation team.

4.5.9 Only IC can direct the CRO to broadcast a “Code 1 is clear” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system, allowing for employees to return to regular work.
4.6 Gas Alarm in the Mill

4.6.1 If a Mill gas alarm has been activated, the Control Room Operator (CRO) will notify Minto Safety Department Personnel, initiate an ERT page-out for a gas alarm in the mill and then broadcast “Code1, Code1, Code1” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system.

4.6.2 Upon completion of the ERT page-out and Code 1 announcements, the CRO will take a radio and satellite phone and then exit the mill by way of the 2nd floor office access door and then left to the outside stairwell.

4.6.3 The CRO will make their way to Secondary Control Room in the Water Treatment Plant South of the Tailings Building.

4.7 Alternate Control Rooms

4.7.1 If the primary control room is deemed unsafe due to smoke, fire or gas, the CRO will relocate to the secondary control room, to provide for critical monitoring and controlled equipment shut down, as required.

4.7.2 The CRO must notify the Incident Commander (IC) that they are evacuating the Primary Control Room and take a radio and satellite phone with them.

4.7.2.1 Primary Control Room – Mill

4.7.2.2 Secondary Control Room – Mill Water Treatment Plant

4.7.2.3 Tertiary Control Room – Tailings Building: Tertiary control rooms are less than ideal, as they do not have phones. They shall only be used in the event that the primary and secondary locations are both out of service.
4.8 Control Room Procedure for Code One Calls from Underground

4.8.1 When a Code 1 call is made from the underground (UG) workings on an UG Polycom phone to the control room, the following procedures will be followed:

4.8.2 The Control Room Operator (CRO) will gather the following information immediately.

4.8.2.1 What is the exact location of the emergency?

4.8.2.2 What is the nature of the emergency? I.e. fire, first aid....if known the number of patients.

4.8.2.3 The CRO will ask the person, if safe to do so, to stay on the phone to provide additional information as needed.

4.8.2.3.1 (This will be vital information in the event that communication is lost prior to Minto Safety Department Personnel responding to the Code 1 call. If communication is broken up and not clearly understood, the CRO will not delay calling the code 1.)

4.8.3 The CRO will acknowledge to the UG caller that the Code 1 has been received and Code 1 procedures are being initiated.

4.8.4 The CRO will call “Code 1, Code 1, Code 1, this is the Control Room Operator, I have a report of an emergency underground” on Channel 1 and Minto Safety Department Personnel will respond and establish Incident Command (IC). The CRO will relay the information gathered and whether or not there is still an open line of communication with UG.

4.8.5 Minto Safety Department Personnel will direct the CRO to initiate an ERT page-out and to broadcast the Code 1 on all simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and telephone paging system 5001 as per normal Code 1 procedure.

4.8.5.1 UG/Contractor Supervisor will be notified by means of Radio Channel 1 and informed that Contractor Mine Rescue/ERT personnel are requested to report to the Emergency Response Centre.

4.8.6 Safety may request more information from UG which the CRO will relay until such time that safety has direct communication with UG.
4.9 Mill Fire Alarm Procedures

4.9.1 If the fire alarm sounds in the Mill, the Control Room Operator (CRO) will check the fire annunciator panel for the area of the mill triggering the alarm.

4.9.2 The CRO will then call a “Code 1”, following the standard Code 1 protocol and report the Mill fire alarm and its alarm location to the Minto Safety Department Personnel.

4.9.3 The CRO will look out all windows for any signs of smoke, paying particular attention to the area the annunciator panel is indicating.

4.9.4 If no smoke is visible, the CRO will remain in the Control Room to monitor critical mill operations, assist with emergency communications and provide for controlled equipment shutdown as required.

4.9.5 If smoke or fire is visible, or a fire has been confirmed by other personnel, the CRO will advise Incident Command (IC) that the control room is unsafe and that they are re-locating to the secondary control room.

4.9.5.1 They will take a radio and the satellite phone with them and evacuate by the safest route.

4.9.6 All other personnel are to immediately exit the mill, by the closest emergency exit and proceed to the Mine Technical Muster Station (can be indoors in the Mine Technical building if directed by a department manager during inclement weather – Stay together as a group).

4.9.7 All personnel are to remain located at the Muster Station unless advised by IC.

4.9.8 No personnel are to block Emergency Response vehicles, Ambulance or Equipment.

4.9.9 The Electrical Department Supervisor will make themselves readily available to assist with the silencing and resetting of the fire alarm when needed.

4.9.10 The Health and Safety (H&S) Superintendent will request accountability reports from all area supervisors responsible for work within the affected area.

4.9.11 Only IC can advise to silence and reset fire alarm and only after investigation of cause.

4.9.12 Only IC can direct the CRO to broadcast a “Code 1 is clear” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system, allowing for employees to return to regular work.
4.10 Fire Alarm in any Production Buildings (Tailings, Water Treatment Plant, Warehouse, Mine Tech, ERT, or Electrical)

4.10.1 Activation of “Code 1” protocol by personnel in the area. If the cause of the alarm is known (i.e. a smoking sandwich maker, or an accidental alarm activation), advise Minto Safety Department Personnel immediately on Channel 1.

4.10.2 Any personnel witnessing a fire is to contact Incident Command (IC) on Channel 1 with the location and nature of the fire you have witnessed.

4.10.3 All personnel (from building with an active fire alarm) will don appropriate clothing and PPE and proceed to the closest emergency exit and proceed to the Mine Technical Building Muster Station. If the fire alarm is at Mine Technical, proceed to the Camp Muster Station.

4.10.4 All personnel are to remain located at the Muster Station unless advised by IC.

4.10.5 Managers and Supervisors for the affected building will ensure they are readily available to answer questions from IC.

4.10.6 The H&S Superintendent will request accountability reports from all area supervisors responsible for work within the affected area.

4.10.7 Only IC can advise to silence and reset fire alarm and only after investigation of cause.

4.10.8 Only IC can direct the CRO to broadcast a “Code 1 is clear” on simplex/duplex radio channels 1, 5, 7, 8, 14, & 16, and the telephone paging system, allowing for employees to return to regular work.

4.10.9 Failure to evacuate a building with an active fire alarm may result in disciplinary action, up to and including termination.

4.10.10 Personnel in buildings without an active fire alarm may remain in their designated Code 1 Emergency Assembly Point (lunch room, office) unless advised by IC.
4.11 Camp Fire Alarm Procedure

4.11.1 Anyone hearing a bunkhouse fire alarm will don appropriate clothing and proceed to the Camp Muster Station where a radio is located inside the gym at the east end of the building.

4.11.2 Ensure the radio is on Channel 1 and initiate the standard Code 1 Protocol.

4.11.3 Stand by and advise others arriving, that Minto Safety Department Personnel has been notified.

4.11.4 Minto Safety Department Personnel will investigate and determine if it is a general alarm - Code 1, or single detector and establish Incident Command (IC) as required.

4.11.5 All personnel in Camp affected by a fire alarm are to don appropriate clothing, proceed to the closest emergency exit and proceed to Camp Muster Station.

4.11.6 If the Camp Muster Station is unsafe, IC will direct personnel to an alternate Muster Station. Minto Travel Camp Muster Lists are updated daily and maintained next to the radio inside the gym building.

4.11.7 Sodexo Manager will meet Health and Safety (H&S) Superintendent to assist with roll call. Area supervisors will assist as required and be directed by Sodexo Manager or H&S Superintendent.

4.11.7.1 Note: Selkirk Towers, Capstone and the main camp do not have interconnected fire alarms. A fire alarm in the main camp will not result in an evacuation of Selkirk Towers or Capstone.

4.11.8 Personnel working in camp (site services, Sodexo, maintenance) will report to the Camp Muster Station and be accounted for by their supervisor or most senior worker on their respective crew.

4.11.9 The supervisors will advise H&S Superintendent of any missing people. H&S Superintendent will relay accountability information to IC.

4.11.10 Emergency Response Team (ERT) will respond to the Emergency Response Centre to don turnout gear and prepare SCBA. Once a sufficient number of team members are prepared, the ERT Captain will contact IC on radio Channel 1 for response and staging instructions.

4.11.11 ERT will respond, in a safe manner, to the defined staging area with the fire truck and ambulance.
4.12 Minto Incident Command Structure

Note: Unified Command may be located on scene, at the Emergency Communications Centre, or a combination of both, depending on Unified Command requirements.
4.13 Emergency Communications Centre
The Emergency Communications Centre (ECC) is a pre-designated location where offsite communications are managed in the event of an emergency.

4.13.1 When? – When an emergency is of sufficient scope that Unified Command is required, the ECC will be activated.

4.13.2 Where? – Mine Tech Boardroom, Mill Boardroom, General Manager’s office, Mine Manager’s office, or Health and Safety (H&S) Superintendent’s Office, depending on the type & location of incident, and the managers who are on-site.

4.13.2.1 Phones, Lync, and Radios are available at these locations.

4.13.2.2 As required a satellite phone is available from the Control Room Operator (CRO).

4.13.3 Who? – General Manager, H&S Superintendent, Manager of area involved (Planning), Human Resources (Logistics), Manager of Administration (Finance), Manager of Environment (if not on scene)

4.13.4 What? –

4.13.4.1 Maintains communication with IC during emergency, advises and supports IC as required.

4.13.4.2 Control off-site communications including, but not limited to; as Capstone Mining Corp., regulators, support agencies, media, neighbors, etc.

4.13.4.3 Notify families when warranted.

4.13.4.4 Source materials, supplies, mutual aid, resources.

4.13.4.5 Arrange for evacuation, general transportation and logistics.

4.13.4.6 Develop business continuity plans.

4.13.4.7 Provides internal and external communication updates during emergency, if and when deemed necessary. This will be done by radio and/or phone/email.
4.14 Emergency Response Staging

4.14.1 The Main Staging area will be located at Emergency Response Centre unless otherwise designated by Incident Command (IC).

4.14.2 Heavy Equipment Staging, necessary for the emergency response, will be staged at the Water Treatment Plant unless otherwise designated by IC and arranged through the ECC.

Reporting to Staging during code 1

4.14.3 All Emergency Response Team (ERT) members

4.14.4 Designated Alternate Medic (Health and Safety Coordinator)

4.14.5 Electrical Supervisor and, based on his/her experience, the crew & equipment necessary for the incident as requested by IC and/or ECC.

4.14.6 Site Services Supervisor (SSS) and, based on his/her experience, the crew & equipment necessary for the incident. Exception: For camp fire alarm, SSS & crew will report to muster station as requested by IC and/or ECC.

4.14.7 Environment Lead and, based on his/her experience, the crew & equipment necessary for the incident as requested by IC and/or ECC.

4.14.8 The Designated Alternate Medic will fill the role of Staging Officer once ERT Captain and Vice-Captain have responded to scene. The Staging Officer will report to IC, upon taking the role, advise of available resources, and update as further resources arrive. If the Staging Officer is to be distracted by other tasks, they will pass the role to an available resource, and update IC of the change.

4.14.9 Personnel and Supervisors that have been called to Main Staging, including ERT members, will remain on alert at the staging area and monitor radio channel 1 until re-assigned, or until stood down by IC.

4.14.10 Heavy Equipment Operators called to staging will remain on alert at the Water Treatment Plant Control Room and continue to monitor radio channel 1 until assigned or stood down by IC.
4.15 Incident Accountability

4.15.1 During an emergency incident, the Emergency Response team (ERT)/Fire Brigade use the Incident Accountability System (IAS) in conjunction with the Incident Command System (ICS), to identify individual members of a team and to account for the assignment of teams.

4.15.2 Span of Control will not exceed 7:1 (7 personnel reporting to 1 Supervisor) and 5:1 is preferred.

4.15.3 The Incident Commander (IC), at an incident, must initiate and use the IAS to account for responding personnel on scene. The IC will directly account for Captains and teams, within a direct span of control.

4.15.4 Colour-coded command vests are worn by Operations level leaders, for easy identification on the incident grounds.

4.15.5 Team Leaders at the Emergency Response Centre must initiate and use the Passport System, to directly account for team members, within a direct span of control.

4.15.6 Upon arrival at the emergency scene, responding Team Leaders will report to the IC for assignment.

4.15.7 Team Leaders and individual responders are accountable for the safety of themselves and other members on their team. Team members must maintain a constant awareness of the position and function of all members working with them. Whenever possible, teams must remain intact and all members work in the same area.

4.15.8 Team Leaders must know the location of all members of the team, at all times. There must be no allocation, re-allocation, or release of team member(s), except by order from IC.

4.15.9 If a team member is in trouble, the other member(s) of the team must take appropriate steps to provide direct help, call for help, or go for help.

4.15.10 **Passport System** – Each ERT member has 2 accountability tags. On the ERT Duty board, the Team Leaders (Captain and Vice-Captain), each have 2 passports adjacent to their name plate. The tags and passports allow for both the Team Leaders and IC, to maintain incident accountability.

4.15.11 **Accountability Board** (found in the box of Health and Safety Department F350 Pick-up unit #531) is used to account for all responders on scene, as well as track ongoing size-up, targets, and benchmarks.

4.15.11.1 "Roll Call" is a ‘Stop & Account’, in which IC requests and receives confirmation from each Team Leader that his/her team is accounted for entirely. In turn, this requires the Team Leaders to do a roll call within their own team, prior to confirming accountability with IC.

4.15.11.2 A roll call is conducted by IC, and is initiated when either IC or a Team Leader announces "Roll Call, Roll Call, Roll Call", over the Operations radio channel.
4.16 Emergency Response Lockout

4.16.1 A comprehensive Emergency Response Lockout procedure exists and is utilized by the Emergency Response Team (ERT) during emergencies & emergency training sessions. It is designed to provide a quicker lockout than the Minto operational lockout procedure, while remaining consistent with:

4.16.1.1 The core of the Minto operational lockout procedure
4.16.1.2 The Minto emergency response incident accountability system
4.16.1.3 Minto unified command structure
4.16.1.4 Acceptable span of control

4.17 Communications Lock Out

**Purpose:** In the event of a site crisis requiring communication limitations, the following actions will be taken to restrict all non-critical communications.

4.17.1 Information Technology Department (IT) can, upon request, disable all incoming and outgoing communications through internet and Polycom phones.

4.17.1.1 **Note:** IT is looking into an access-list that will give key personnel Internet access:
- 4.17.1.1.1 Safety Department
- 4.17.1.1.2 General Manager
- 4.17.1.1.3 Mine Manager
- 4.17.1.1.4 Human Resources
- 4.17.1.1.5 Information Technology

4.17.2 Site contractors will be required to restrict their connections. IT will:

4.17.2.1 Contact Dumas and Nuway Crushing to inform them that a communications lock is in effect and that Minto IT has disabled their internet access.

4.17.2.1.1 **Note:** Dumas internet access is managed by Minto IT personnel

4.17.2.2 Contact Pelly Construction, inform them that a communications lock is in effect, and they are required to power down their Internet Modems.

4.17.2.2.1 **Note:** Pelly has 3 modems located in their front office providing phones and internet. They are in the open and anyone can access them.

4.17.2.3 Contact Dyno via radio, inform them that a communications lock is in effect, and they are required to power down their Internet Modems and restrict calls on their satellite phone system.

4.17.2.3.1 **Note:** Dyno has one modem in their office. It is accessible by anyone.

4.17.2.4 In the unlikely event that IT personnel are unable to perform these duties, a Human Resources leader will arrange the communications lockdown.
### 4.18 Initial Incident Responsibility Matrix

<table>
<thead>
<tr>
<th>POSITION</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
</table>
| **Medic**                     | - Take call from caller  
- Determine if and when a Code 1 will be initiated through Mill Control  
- Attend and coordinate response for all incidents involving “serious injury”, as defined in Sec. 33, of the OHS Act  
- Respond directly to the scene, establish IC as qualified, & conduct size-up  
- Coordinate initial response as qualified  
- Manage medical care as required  
- Notify Area Supervisor, Health and Safety Superintendent |
| **Mine Rescue Team (ERT)**    | - Maintain team safety as priority  
- Rescue and protect human life  
- Protect and mitigate loss to mine property  
- Assist with rehabilitation of mine property and equipment |
| **Area Supervisor**           | - Secure the incident scene for all incidents involving “serious injury” and “serious accident”, as defined in Sec. 33 of the OHS Act  
- Coordinate evacuation of work area  
- Accountability of workers under his/her responsibility  
- Be available to IC for information and assistance requests.  
- Participate with Incident Investigation |
| **Department Manager**        | - Respond to the ECC when summoned and provide Unified Command Support  
- Coordinate and participate in incident investigation process of all incidents involving “serious injury” and “serious accident”, as defined in Sec. 33 of the OHS Act  
- Ensure follow up action is completed |
| **H&S Superintendent**        | - Notify General Manager, Department Manager, Area Supervisor and affected Contractors to provide follow up report of progress  
- Assist with accountability  
- Provide for unified incident command support  
- Provide support to IC and ECC as required  
- Provide status updates to control room, as required  
- Coordinate recovery and investigative activity  
- Ensure all government reporting has been completed  
- Provide follow up reports to regulatory bodies as required  
- Organize and conduct post-incident debriefings including Critical Incident Stress as required  
- Advise HR if EFAP required for post incident debrief/services  
- Assist with Incident Investigation |
| **General Manager**           | - Receive briefings on incident details  
- Provide for unified incident command support  
- Provide support to IC and ECC as required  
- Verify notification of regulatory agencies, government and Minto Explorations Ltd. corporate office as required  
- Verify scene remains secure until released by regulators (if applicable)  
- Verify compliance with standards and government regulatory requirements  
- Follow up communication to corporate and media  
- Responsible to authorize all off site communication |
## 4.19 Follow up Responsibility Matrix

### Incident – Injury / Fire / Spill / Other

<table>
<thead>
<tr>
<th>POSITION</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H&amp;S Superintendent</strong></td>
<td>• Maintain Scene Security at incident. Instruct ERT / Mine rescue of further requirements or stand down / all clear as directed by IC.</td>
</tr>
<tr>
<td></td>
<td>• Notify Authorities.</td>
</tr>
<tr>
<td></td>
<td>• Ensure legislative compliance.</td>
</tr>
<tr>
<td></td>
<td>• Assist with site incident investigation and evidence gathering. Report progress to GM and Department Manager.</td>
</tr>
<tr>
<td></td>
<td>• Co-ordinate plan to get all rescue equipment back to a state of emergency preparedness.</td>
</tr>
<tr>
<td></td>
<td>• Organize and conduct post-incident debriefings including Critical Incident Stress as required.</td>
</tr>
<tr>
<td></td>
<td>• Advise HR if EFAP required for post incident debrief/services</td>
</tr>
<tr>
<td><strong>Medic</strong></td>
<td>• Participate in debrief of rescue team.</td>
</tr>
<tr>
<td></td>
<td>• Roll out plan to ERT to get all rescue equipment back to a state of emergency preparedness.</td>
</tr>
<tr>
<td></td>
<td>• Advise Captain when he may release the team</td>
</tr>
<tr>
<td><strong>Mine Rescue Team / ERT</strong></td>
<td>• Support debrief of incident.</td>
</tr>
<tr>
<td></td>
<td>• Ensure all rescue equipment is back to a state of emergency preparedness.</td>
</tr>
<tr>
<td></td>
<td>• ERT complex clean up.</td>
</tr>
<tr>
<td></td>
<td>• Captain to ensure that all team members are provided the time and assistance needed to recuperate from the response.</td>
</tr>
<tr>
<td></td>
<td>• Captain to release the team upon completion.</td>
</tr>
<tr>
<td><strong>General Manager</strong></td>
<td>• Ensure necessary notifications are made to Capstone Mining Corporation / Yukon OH&amp;S Mines Inspector / External Family / Media.</td>
</tr>
<tr>
<td><strong>Department Manager</strong></td>
<td>• Organize and participate in the incident investigation and gathering of evidence.</td>
</tr>
<tr>
<td><strong>Environmental Representative</strong></td>
<td>• Ensure necessary notifications are made, if necessary, to Yukon Spill Response Line</td>
</tr>
<tr>
<td><strong>Human Resources</strong></td>
<td>• Arrange for transportation and logistics of site personnel if required.</td>
</tr>
<tr>
<td></td>
<td>• Arrange for EFAP to provide post incident debrief/services upon request from H&amp;S Superintendent</td>
</tr>
</tbody>
</table>
5 UNDERGROUND EMERGENCIES

5.1 Underground Emergency – Any person discovering an emergency shall:

5.1.1 Maintain his/her own safety as the first priority, by ensuring he/she is in, or moving towards, a safe location.

5.1.2 Report the emergency by calling the Control Room Operator (CRO), or by sending another worker to call the CRO. This can be done by either:

5.1.2.1 Calling the CRO directly with a Polycom phone, located at refuge stations

5.1.2.2 Relaying the message via the underground shop using the Femco phone system. Femco phones are located at the underground shop, portal muster station, inside and outside refuge chambers, and on the ramp near active mining areas.

5.1.3 At an emergency scene where there are no current or impending, unmanageable hazards with risk to life or health (scene is safe) and if someone has been sent to report the emergency to the control room operator, stabilize the scene and try to rectify the situation with the tools on-site.

5.1.4 Perform first aid, if safe to do so.

5.1.5 If there are current or impending hazards that cannot be stabilized, rope off or barricade the area if possible and evacuate.

5.1.6 Escape to the nearest refuge station or out of the mine and warn all others along the way.

5.1.7 Report the emergency as outlined above the Polycom phone in the Refuge Station, by calling the appropriate numbers from the Emergency Contact Number sheet.

5.1.8 When reporting the incident, it is of importance that you include the following information:

5.1.8.1 Where are you and where is the emergency?

5.1.8.2 Who is calling and who is involved?

5.1.8.3 What happened and what steps have you taken to correct the problem.

5.1.8.4 When did this happen?

5.1.8.5 Who and what do you need for a response? First aid, rescue stench gas, other assistance?

5.1.8.6 Stand by the phone and wait for further instructions.
5.2 Underground Emergency - Fire

Anyone discovering a fire shall:

5.2.1 Maintain his/her own safety as the first priority, by ensuring he/she is in, or moving towards, a safe location.

5.2.2 If safe to do so, activate fire suppression system, if fire is on equipment.

5.2.3 Utilize the Self-Rescuer on your belt to protect yourself from the hazardous environment & smoke.

5.2.4 If safe to do so, and if fire is in its incipient stage (early burning), use nearby fire extinguishers to extinguish the fire.

5.2.5 Do not expose yourself to unnecessary risk and keep a clear area of retreat behind you.

5.2.6 If fire is not immediately controlled in its incipient stage (early burning), do not hesitate, leave the area immediately and evacuate, and warn all personnel in the immediate area to evacuate to a safe location.

5.2.7 Travel to the nearest refuge station or out of the mine, if safe to do so.

5.2.8 Access a safety box, if available, and switch your self-rescuer to an Ocenco Escape Breathing Apparatus (EBA 6.5) as needed to access a Refuge Station, Fresh-air Raise, or other area of refuge.

5.2.9 If unable to travel safely to refuge station, take refuge in a heading and utilize any available material – vent tubing, clothing, etc. to construct a shield around yourself. Remain in the location until the mine rescue team arrives.

5.2.10 Once you have reached the refuge station or fresh air base follow refuge station protocols and provide for accountability.

5.2.11 As soon as safely possible, report the fire by calling the Control Room Operator (CRO), as outlined section 5.1.

5.2.12 Initiate the Stench Warning System or advise Control Room Operator to immediately call for a stench release. See Section 5.4 for instructions on performing a Stench Gas Release.

5.2.13 Initiate the “Code 1” Protocol after the initiation of a Stench Gas Release
5.3 Underground Emergency Evacuation
Upon being notified of a mine emergency evacuation either by radio, phone or stench warning system:

5.3.1 Stop work immediately.
5.3.2 Note the time you received the warning.
5.3.3 Calmly follow exhaust ventilation (preferable route dependent on location) to the nearest refuge station or out of the mine.
5.3.4 Utilize the Self-Rescuer on your belt if necessary to protect yourself from a hazardous environment.
5.3.5 Access a safety box, if available, and switch your self-rescuer to an Ocenco Escape Breathing Apparatus (EBA 6.5) as needed to access a Refuge Station, Fresh-air Raise, or other area of refuge.
5.3.6 Once safely at the refuge station or central muster location, follow the refuge station protocol and provide for accountability.
5.3.7 Review the refuge station emergency procedures posted inside the refuge chamber.
5.3.8 Check the Polycom phone for operation and call outside the mine. Report the following information:
   5.3.8.1 Your name and name of others in refuge.
   5.3.8.2 Refuge Chamber location.
   5.3.8.3 Outside conditions.
   5.3.8.4 That you are safe in refuge.
5.3.9 Remain in the refuge station, even if communication is cut off.
5.3.10 Stay calm, conserve energy and cap lamps, sit down on benches.
5.3.11 Do not leave the refuge station to wander about the mine or to seek safe passage out.
5.3.12 Remain in the refuge until you are rescued by mine rescue personnel or contact is made declaring it safe to leave the refuge station by the mine official in charge of the emergency.
5.3.13 UG Mine Rescue will be activated by the Code 1 Procedure for Mill Control Room Operator (See section 4.5.)
5.3.14 All situations requiring the release of stench gas requires activation of Code 1 protocol. See Section 5.4-5.5 for instructions on performing a Stench Gas Release.
5.4 Stench Gas Release
In the event of an emergency that requires the release of stench gas underground:

5.4.1 When notified of an active fire underground, large fall of ground, or an inrush of water, the Control Room Operator (CRO) will release the stench gas by operating the remote activation system (if installed).

5.4.2 The CRO will activate the “Code 1” Protocol and report “Code 1, Code 1, Code 1, Emergency underground, stench gas release needed” on radio Ch. 8-Mill and Ch. 1-Emergency.

5.4.3 The CRO will confirm with the Mill Ops Supervisor that trained personnel are responding to the Fresh Air Raise (FAR) to activate and/or confirm activation of the stench gas system.

5.4.4 CRO will proceed with “Code 1” Protocol and call “Code 1, Code 1, Code 1” on all other radio channels and the emergency telephone PA system – ext 5001.

5.5 Operation of Stench Gas System

5.5.1 Mill Operations Supervisor or trained designate, will proceed, via the most direct route, to the Fresh Air Raise (FAR).

5.5.2 Instructions on the use of the stench gas system are available for reference at the panel.

5.5.3 Turn the activation switch on the Stench Gas System to the “ON” position.

5.5.4 Open cabinet using supplied screwdriver and turn the cabinet locks to a vertical position by turning counter-clockwise. Pushing in on the cabinet door can make this easier.

5.5.5 Check the valve controller in the lower right corner. The indicator should show “open”.

5.5.6 Examine the pressure gauge, you should see the bottle pressure dropping.

5.5.7 If the pressure is not dropping, open the “Bypass Valve” ball valve by sliding the handle lock upwards and rotating the handle 90 degrees. Do not open the “Vent” valve on the left side.

5.5.8 Report to Incident Command the status of the stench gas activation.
5.6 Refuge Stations

5.6.1 Portable refuge stations are maintained in locations of mine development to allow for a less than 15 minute travel time by foot.

5.6.2 All underground personnel will proceed to the nearest place of safety (refuge chamber, fresh air base or portal muster station) during all emergencies that affect the underground.

5.6.2.1 Refuge station posted “code of conduct” must be followed by everyone in the refuge station.

5.6.3 Refuge stations are equipped with a Femco phone on the interior, and another on the exterior, for communication between mustered workers and mine rescue personnel.

5.6.3.1 The Femco phone system can also be used to communicate between the Underground Shop, the portal muster station and the refuges.

5.6.4 Refuge stations are equipped with a Polycom phone on the interior, for communication between mustered workers and the Control Room Operator (CRO), as well as other personnel monitoring a Polycom phone.

5.6.4.1 Polycom phones will be inoperative during a power outage.

5.6.5 Each refuge station is equipped to supply oxygen for 18 persons for 72 hours. They are also equipped with drinking water, emergency food rations, and chemical toilets.

5.7 Main Ventilation Control in Event of a Fire

5.7.1 In the event of an underground fire, efforts will be undertaken to ensure ventilation to the mine is maintained.

5.7.2 Operation of the main ventilation fans will be monitored to ensure continuous operation of the fans at all times.

5.7.3 The effects of the alteration to the main ventilation fans shall be clearly understood before any changes are made.

5.7.4 There will be no alteration to the operation of the main fans without the authorization of the Mine Manager or Designate and Notification to the YWCHSB Safety Officer as defined under the regulations.
6 UNDERGROUND EMERGENCY RESPONSE

6.1 Underground Emergency – System of response

6.1.1 Initiate mine rescue/emergency response notification procedures as directed by Underground (UG) Shift boss or designate.

6.1.2 Upon completion of the emergency response notification procedure:

6.1.2.1 Confirm Incident Command (IC) has been initiated.
6.1.2.2 Assign designate to initiate and maintain a log of events.
6.1.2.3 Establish the EMERGENCY COMMUNICATION CENTER (ECC).
6.1.2.4 Advise YWCHSB of activation UG mine rescue (UGMR) response.
6.1.2.5 Keep all Communication Equipment on Standby.
6.1.2.6 Direct Mine Technical personnel and the U/G Contractor Supervisor to the ECC.
6.1.2.7 Complete the EMERGENCY DATA SHEET by obtaining the following information:
   6.1.2.7.1 Location of emergency
   6.1.2.7.2 Name of person reporting the emergency
   6.1.2.7.3 Nature and severity of injuries and/or incident
   6.1.2.7.4 Assistance required
   6.1.2.7.5 Number of people involved

6.1.3 IC and ECC Personnel will delegate a mine official in charge of the rescue operation and develop a preliminary plan.

6.1.4 UGMR Team will respond to the Emergency Response Centre.

6.1.5 UGMR Team captain will assume command of the team.

6.1.6 UGMR Team will don all protective gear and bench test BG4’s.

6.1.7 UGMR Team will prepare all equipment needed to respond UG.

6.1.8 UGMR Team will await instructions by Mine Rescue Coordinator (Minto Safety Department Personnel).

6.1.9 UGMR Team will be advised of plan.

6.1.10 Second Mine Rescue Team responds to Emergency Response Centre for briefing and preparation for 2nd shift.

6.1.11 Tertiary back up mine rescue team(s) must be considered and depending on the initial assessment of situation contact needs to be made for mutual aid as soon as reasonably possible.

6.1.12 UGMR Team will respond to portal with trailer hitch-equipped Underground Toyota.

6.1.13 Mine Rescue Coordinator will respond to the Underground Shop to monitor the Femco Phone and relay information to Incident Command/Unified Command.
6.1.14 UGMR Team will tag in at portal, complete final preparations for response, then check-in with ECC, immediately prior to breaking plane to underground.

6.1.15 If beneficial, the team will retrieve the UGMR trailer from the Fresh Air Raise (FAR) access drift.

6.1.16 UGMR Team will test and record atmosphere conditions as required by the ECC and Mine Rescue Coordinator and report their findings to the ECC.

6.1.17 UGMR Team will also report any significant discovery, change in condition of team and/or environment and any benchmarks to ECC (whenever access to communications is available), until they are back on surface, tagged out & reported tagged out to ECC.

6.1.18 The UGMR Team on shift will work the Mine Official’s plan, as directed through the Mine Rescue Coordinator.

   6.1.18.1 If at any point it is determined by the UGMR Team Captain that it is unsafe to work the plan as directed, or if it is determined by the UGMR Team Captain that the team is not able to perform the tasks assigned, he will immediately report that to the ECC, so the Mine Official can design an alternate plan.

6.1.19 Once on surface, the UGMR Team coming off-shift will give a thorough report to the UGMR Team coming on-shift. They will then, depending on the availability of designated BG4 techs, perform whatever tasks are necessary to get their BG4’s and other equipment back in service, prior to rest & rehabilitation.
7 EVACUATIONS

7.1 Medical Emergency Evacuations

Yukon Emergency Medical Services dispatch is a critical resource in the event of a medical evacuation. The Medic will inform Yukon EMS dispatch in every instance where there is a change to the site access such as barge removal, ice bridge closure, or the initiation of Ice Bridge or barge operation.

7.1.1 The Minto Mine Medic will control all medical / trauma emergencies.

7.1.2 Upon patient assessment, Medic will determine course of action, including return to work (RTW) or further medical assessment and evacuation.

7.1.3 If medical evacuation is deemed necessary, the Medic will contact Yukon EMS Dispatch and provide history and assessment findings.

7.1.4 The EMS dispatch call is a two element call and the Medic will need to provide history and assessment twice.

7.1.4.1 The first element dictates the triage of the transfer and the second element is directly to a medical professional responsible for the transfer.

7.1.4.2 These two elements should be available back to back. Yukon Dispatch is responsible for transfer method decision.

7.1.5 All Yukon EMS transfer by road, air, or combination is provided with nursing and paramedic personnel.

7.1.6 Air transport is provided with a flight nurse and a flight paramedic.

7.1.7 Triage decisions will be made based on patient condition and other emergencies taking place in the area.

7.1.8 Minto Mine is a high priority community, as deemed by Yukon EMS, and all efforts to supply our needs will be made. One hour plus flight time is the mandate for response by EMS, so the medic needs to consider that as part of the patient treatment and care.

7.1.8.1 EMS dispatch provides all patch call information to receiving facilities if they are involved in the transfer in any way.

7.1.9 In the event that an emergency transport decision is made without, or outside of, consultation with Yukon EMS Dispatch, they need to be notified as soon as reasonably possible, to provide for additional transport from destination and/or to document transfer decisions made.

Emergency contact numbers can be found in Appendix A.
7.2 Non-Emergency Medical Transfers

Non-Emergency Transfers when Ice Bridge or Minto Barge available

7.2.1 Non-critical, stable patients who require further medical assessment and do not require medical attention during transfer, will be taken off site by a designated driver at the first reasonably appropriate time.

7.2.2 Non-critical, stable patients who require further assessment and medical attention during transfer must be taken off site via Ambulance.

7.2.2.1 EMS dispatch must be contacted prior to departure, to coordinate: the transfer, the receiving facility, and the possibility of further transfer requirements.

7.2.2.2 If EMS dispatch will not be involved in the actual transfer operation, a call to the receiving facility by the Minto Medic is required (patch).

7.2.2.3 If EMS dispatch is involved in any way with the actual transfer, they will make the patch calls.

7.3 Alternate Transportation for Medical Emergencies

7.3.1 In cases where weather conditions will prevent aircraft from landing at the Minto Mine Airstrip, alternatives include:

7.3.1.1 During summer and early winter, small charter planes (Such as a Cessna Caravan) could land at the decommissioned government strip on the East side of the river.

7.3.1.1.1 Note: The aircraft used by Alcan for Yukon EMS flights (King Air) can’t land at the Minto Landing airstrip.

7.3.1.2 A helicopter could be chartered to fly in at lower elevation allowing pick-up below cloud level and transfer across the river to an ambulance or fly directly to Carmacks for transfer to a Yukon EMS ambulance or aircraft.

7.3.2 If a Yukon EMS Medivac aircraft is not available or will be significantly delayed;

7.3.2.1 A chartered aircraft may be requested for transporting the patient.

7.3.2.1.1 Aircraft charters should be requested through the Travel Coordinator between 06:00-18:00.

7.3.2.1.2 Phone numbers for Tintina Air, Alkan Air and Helicopter providers can be found in Appendix A.

7.3.3 Helicopter services and chartered aircraft may be utilized only after exhausting options through Yukon EMS dispatch.
7.4 Site or Camp Evacuation

7.4.1 In an event requiring partial or total evacuation of the mine site, several options are available and must be considered depending on the time of year and the availability of transportation.

7.4.2 With the exception of medical aid incidents, site evacuations (including evacuation arrangements and external resources) will be authorized by the General Manager or his designate.

7.4.3 Travel arrangements shall be coordinated through the Travel Department or HR and Purchasing department should be involved in all decisions that will result in costs being associated.

7.4.3.1 The designated travel coordinator shall begin arranging connecting flights or hotel accommodations as soon as an evacuation is deemed to be necessary.

7.4.4 Options for evacuation include road or air transportation, depending on the time of year and the availability of the barge or Ice Bridge.

7.4.5 Air transportation is dependent on weather and availability of aircraft.

7.4.5.1 Early communication with airlines is critical for the preparation of staff and aircraft.

7.4.5.2 Accurate weather assessment from site is critical to incoming aircraft; a designated person to provide this information must be arranged.

7.4.6 Transportation by air – Pelly Crossing/Carmacks/Whitehorse (Tintina Air, Alkan Air, Air North, Combination)

7.4.7 Transportation by air/road combination – Air to Carmacks and Air/Coach to Whitehorse. Fuel delivery to Carmacks may need to be arranged to refuel planes for multiple flights. The designated air agency will arrange for fuel transfer. Mackenzie Petroleum, Pacesetter Petroleum, or North 60 Petroleum.

7.4.8 Bus to river crossing and helicopter transfer across river to Coach. If road access available:

7.4.8.1 Transportation by Coach

7.4.8.2 Transportation by onsite Van – Pelly Crossing

7.4.8.3 Transportation by onsite bus – Carmacks (on site)

7.4.9 In the event hotel rooms are not available, staging of people will be arranged at Vanier Catholic Secondary School in their gymnasium until such time as staff can be put on flights out of Whitehorse.

7.4.9.1 Vanier Catholic Secondary School - 16 Duke Road – Whitehorse

7.4.9.2 Minto will also have access to the School Kitchen to prepare food for evacuees.
7.4.10 In the event that Minto camp needs to be evacuated but the opportunity to keep our mill running exists, Minto has a solution to provide temporary housing for the personnel required to fulfill our production needs.

7.4.10.1 *Alaska Structures* can be contacted to implement the rapid deployment of housing for between 40-160 employees. This would be set up at either our Minto airstrip or the government airstrip by the Yukon River.

7.4.10.2 The main point of contact in the event of an emergency relating to camp is the HR Manager.

8 MINE RESCUE

8.1 Onsite Mine Rescue

8.1.1 Minto Mine will retain two teams of capable personnel that have been trained in Surface and Underground Mine Rescue. A required third UG team would consist of a mutual aid response from *YWCHSB* and neighboring mines with a mutual aid agreement in place.

8.1.2 The UG mine rescue unit consists of a minimum of three UG mine rescue teams summoned to a mine disaster; if the rescue operation will extend beyond 6 to 8 hours, the additional third team must be called in. In order to reduce fatigue, the teams are rotated to allow one team at work, one team on hand as backup and the third team at rest.

8.1.3 A typical rotation for a three team unit is as follows:

8.1.3.1 Team Working/Backup Team/ Team at Rest (2 hour maximums)

8.1.3.2 A team/ B team/ C team

8.1.3.3 B team/C team/ A team

8.1.3.4 C team/A team/ B team

8.1.4 Teams have approximately 4 hours rest prior to working for 2 hours.

8.2 Mutual Aid

8.2.1 If the rescue operation will extend beyond 6 to 8 hours, additional mine rescue teams must be called in. Mutual agreements are in place so that if more than 2 teams are required, additional team(s) will be provided by one or more of our mutual aid partners. *YWCHSB* must be notified of any instance of mutual aid requests.

8.2.2 YWCHSB mutual aid contact: Ron Ratz, Yukon Mine Rescue Coordinator.

8.2.3 For more detail, the mutual aid agreements can be found in Appendix D.
9 UNDERGROUND MINE SAFETY PLANNING

9.1 Mine Safety Plan for Minto Underground

9.1.1 The Minto Mine Underground consists of a decline accessing the current production level at 620m elevation.

9.1.2 The Underground may also be accessed via a ventilation raise equipped with ladder-way, a plan showing the mine layout at the time of this revision is included in Appendix E.

9.1.3 Up to date ventilation prints are kept in the ERT building, Mine Tech offices, and refuge stations.

9.1.4 The details are described in our Quartz Mining License QML-0001 Schedule C Plans and authorized Activities under section 14 Phase IV Mining Plan Item 6. Production stoping operations on the 650, 630 and 620 Levels will be undertaken during 2017.

9.1.5 A safety bay in close proximity to the working face is equipped with an industrial sized metal “Job Box “with emergency equipment inside. Basic contents:

9.1.5.1 Six Ocenco EBA 6.5 Escape breathing apparatuses good for 1 hour each.
9.1.5.2 Six spare Self-Rescuers
9.1.5.3 One level 3 first aid kit
9.1.5.4 Six spare emergency blankets
9.1.5.5 Five gallon jug of fresh water
9.1.5.6 Back up emergency lighting

9.1.6 A basket stretcher with full spinal immobilization equipment, paramedic level jump kit and prehospital medical supplies is located near the portal entrance at all times. Identical stretcher kits are located near each of the refuge stations.
10 OTHER EMERGENCIES REQUIRING A PLANNED RESPONSE

10.1 Major Power Failure

10.1.1 In the event of a major power failure affecting any portion of the operating facilities at the mine, the employees within the working areas need to be aware of the hazards of unexpected loss of power and safely retreat to the nearest control room, lunch room or office to be accounted for by their supervisor.

10.1.2 Supervisor of the area of concern shall notify Minto Safety Department Personnel at onset of power outage.

10.1.3 Electrical supervisor needs to be contacted as soon as reasonably possible to assess the reason for the outage, provide alternate power if able and to contact Yukon Energy Corporation (YEC) to report outage, if applicable. The Mill Control Room has a satellite phone available for this purpose.

10.1.4 Minimizing radio traffic is essential during a power failure so the bulk of communication related to accountability should be done face to face.

10.1.5 Supervisors will attempt to locate and account for all workers under their control and be available to report the accountability check to Minto Safety Department Personnel when requested.

10.1.6 Minto Safety Department Personnel will make contact with area supervisors to confirm accountability of the respective workers.

10.1.7 Any missing or identified as injured workers will require the initiation of search and rescue efforts and **activation of the Code 1 Protocol**.

10.1.8 Once the power has been restored safe start up procedures must be followed and all work must be directed by the supervisor in charge of the affected areas.

10.1.9 If a major power failure occurs underground, all work stops and workers will report to refuge station or surface and report to the shift boss for accountability purposes.

10.1.10 Underground (UG) workers will remain in the safe refuge locations until instructed to proceed back to work by shift boss.

10.1.11 Any coordination of emergency information related to the power failure will be provided to the UG shift boss by Minto Safety Department Personnel.
10.2 Underground Mine Ventilation Loss Action Plan

10.2.1 In the event of fan failure due to a malfunction, accident, power failure, or other such unplanned or unscheduled event, this action plan applies to all underground employees and contractors whose work areas are affected by the temporary interruption of the operation of the main or auxiliary fans in the mine.

10.2.2 Main Ventilation Interruption Procedure: In the event of interruption of main ventilation system, all work underground will cease, mobile equipment operation will stop, and employees will report to the nearest refuge station. All personnel underground will be accounted for by the U/G Contractor shift boss.

10.2.2.1 If the main fan is not restarted within two hours, all personnel will travel to surface until main ventilation is re-established.

10.2.3 Auxiliary ventilation Interruption Procedure: In the event of interruption of auxiliary ventilation, mobile equipment operation in the area affected will stop and shut down. Workers in the area will assess the reason for the interruption and confirm that main ventilation is operational.

10.2.3.1 If unable to determine cause for auxiliary ventilation interruption and reestablishment within 15 minutes, workers will leave the affected area and the shift supervisor must be contacted to coordinate the repair and perform gas testing during and after outage.
10.3 Missing Person Action Plan

10.3.1 Potential exists where persons may become lost on or traveling to and from the property. Such incidents can occur under the following circumstance:

10.3.2 Employee or Contractor personnel engaged in surface exploration, travel or any other activities are overdue and cannot be located or contacted.

10.3.3 Upon recognizing that personnel are unaccounted for on the property all personnel must:

10.3.3.1 Immediately notify Minto Safety Department Personnel on channel 1 and be prepared to provide known information;

10.3.3.2 Name of missing person(s)

10.3.3.3 Last known location or destination (check with Minto Travel for details)

10.3.4 Minto Safety Department Personnel will immediately advise the Area Supervisor, and Area Manager to collectively;

10.3.4.1 Designate a mine official in charge of the search as Incident Command (IC) and communications/planning.

10.3.4.2 Assess and determine the level of response required.

10.3.4.3 Gather all available information about the missing persons including last known location.

10.3.4.4 Advise the RCMP of the circumstances and request further assistance as required.

10.3.4.5 Designate ERT/Mine Rescue to stand-by and assist the RCMP in search efforts as directed

10.3.4.6 Any search activity needs to be coordinated through the Incident Commander in charge of the search.

10.3.4.7 Search by vehicle should be conducted with two people in each vehicle, in coordination with RCMP and have effective communication and plan in place prior to conducting search.

10.3.4.8 Survival gear, rescue tools, tow straps, fuel, etc. should all be considered and taken along during search activities.

10.3.5 Stand-by to provide further information and assistance as required.

10.3.6 Once search is complete follow up notification to all involved must be conducted including RCMP.

10.3.7 Provide for follow up investigation to identify contributing factors and recommend future prevention actions.
10.4 Outbreak of Sickness or Gastroenteritis Action Plan

10.4.1 Due to the remoteness and group living situation at the Mine Site, it is important to have a plan in place that outlines the appropriate actions to be taken in the event of an outbreak of sickness or a communicable disease.

10.4.1.1 This action plan has been developed using the Yukon Communicable Disease Control Guideline.

10.4.2 Case Definition for Outbreak:

10.4.2.1 At least one of the following must be met: Two or more liquid or watery stools above what is normal for the person within a 24-hour period, OR

10.4.2.2 Two or more episodes of vomiting in a 24-hour period, OR

10.4.2.3 Both of the following: (a) lab confirmation of a known enteric pathogen and (b) At least one symptom compatible with gastrointestinal tract infection (i.e. nausea, vomiting, diarrhea, abdominal pain or tenderness)

10.4.3 Outbreak definition:

10.4.3.1 Three or more cases of gastroenteritis infection (as defined above), potentially related, occurring within a four day period, within the facility.

10.4.4 Case characteristics:

10.4.4.1 Abrupt onset of diarrhea and vomiting

10.4.4.2 Fatigue and occasional low-grade fever

10.4.4.3 Average duration 18-24 hours, rapid recovery

10.4.5 Suspected etiology:

10.4.5.1 Noro-type virus. Confirmation by submission of sample for analysis.

10.4.6 Response measures:

10.4.6.1 Sick bay and isolated washroom facilities needs to be provided.

10.4.6.2 Sherwood Wing NE and Sherwood washroom need to be readied for service by Sodexo.

10.4.6.3 Communication to site informing of the situation and requesting people to report illness and use strict personal hygiene practices.

10.4.6.4 Cleaning of the quarantine areas undertaken by people informed of the risks and trained in the protection required.

10.4.6.5 Food must be delivered, provisions for hydration need to be ensured. Electrolyte replacement fluids should be provided (“Squincher” is current warehouse stock.)

10.4.6.6 Cleaning of all other areas using hospital grade disinfectant cleaner or a bleach solution mixed according to Health Canada recommendations: 3 times per day in all bathrooms, corridors and common rooms.

10.4.6.7 Kitchen and dining areas are cleaned on a continual basis

10.4.6.8 Discontinue communal food dispensing (salads, fruit bar, etc.). All food portions individually wrapped.
10.4.6.9 Contact Yukon Communicable Disease Control to advise of outbreak.

10.4.6.10 Consider notification of offsite personnel that may be scheduled to come into camp during outbreak and decide on travel restrictions, interruptions during the period

10.4.7 Recommendations for ongoing management of outbreak:

10.4.7.1 If decline in case numbers to sporadic or nil:
   10.4.7.1.1 Laundering of all bedding: sheets, pillow cases, and quilts or blankets
   10.4.7.1.2 Laundering of all clothes used by or exposed to sick individuals.
   10.4.7.1.3 Cleaning of all surfaces with hospital grade disinfectant cleaners (or bleach solution).
   10.4.7.1.4 Clothes that have been stored and unexposed to sick persons can be left in place.
   10.4.7.1.5 Any drawers, shelves, etc. used by sick individuals should be cleaned.

10.4.7.2 If sporadic new cases (1 to 2 per day):
   10.4.7.2.1 Continue use of Sick Bay and isolation area.
   10.4.7.2.2 Continue food preparation precautions.
   10.4.7.2.3 Allow new staff in but with briefing on situation and need for vigilant personal hygiene.

10.4.7.3 When no new cases reported for at least 48 hours:
   10.4.7.3.1 Terminal cleaning of isolation areas, cleaned as above with hospital grade disinfectant cleaner or bleach solution.
   10.4.7.3.2 Designate and maintain a smaller isolation area for possible new cases over next 2 to 4 weeks.
   10.4.7.3.3 Allow new staff to come in for normal tour of duty.
   10.4.7.3.4 Return to normal food preparation.

10.4.7.4 If continued high numbers (more than 3 new cases per day) or escalation of cases:
   10.4.7.4.1 Continue isolation/sick bay area with appropriate cleaning regimen.
   10.4.7.4.2 Continue daily monitoring of new cases and their origin (bunk house).
   10.4.7.4.3 If more than one new case per bunk house, undertake intense cleaning of entire affected bunk.
   10.4.7.4.4 Close non-essential common areas.
   10.4.7.4.5 Allow no in-rotation in of new personnel.
   10.4.7.4.6 Consider camp closure according to demands on personnel.

10.4.7.5 If continued high or increasing numbers despite measures in 10.4.5 being followed:
   10.4.7.5.1 Close camp with clean out of entire camp: bunkhouses, food preparation and consumption areas, offices, common rooms and all non-industrial sites.
   10.4.7.5.2 Allow reopening of site following clean up.

10.4.7.6 If apparent cessation of outbreak followed by new cases after 48 hours or more:
   10.4.7.6.1 Follow recommendations as in 10.4.4 & 10.4.5.
10.5 Water Storage Pond Dam

The following table lists pertinent background and contact information pertaining to the emergency preparedness plan for the Dam structure.

Table 10-1

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dam Name</td>
<td>Minto Water Storage Pond Dam</td>
</tr>
<tr>
<td>Owner’s Name</td>
<td>Capstone Mining Corp Ron Light, General Manager</td>
</tr>
<tr>
<td>Stream Name</td>
<td>Minto Creek</td>
</tr>
<tr>
<td>Storage Pond Name</td>
<td>Minto Water Storage Pond</td>
</tr>
<tr>
<td>Water License #</td>
<td>QZ14-031, Amendment #1, and QML-0001</td>
</tr>
<tr>
<td>Dam Location</td>
<td>Zone 8V Easting: 386541 Northing: 6945555 Map Sheet: 105 I/11</td>
</tr>
<tr>
<td>Access to Dam</td>
<td>The downstream toe of the dam can be accessed from a road located at Km 2.0. The top of the dam can be accessed from the main mine road that runs along the left abutment at Km 1.5. The main access road crosses Minto Creek on the Yukon River flood plain approximately 11.0 Km from the mine site.</td>
</tr>
</tbody>
</table>

10.5.1 Notification Procedures – Any on-site person (observer) who learns or suspects for good reason that there is a possibility of a potential dam failure shall immediately report the situation to the Mill Control Room Operator (CRO) and Minto Geotechnical Engineer (qualified for dam safety) as a dam incident.

10.5.2 The observer shall provide the following information:

10.5.2.1 Name
10.5.2.2 Location of the dam incident (location and extent)
10.5.2.3 Type of problem (increased seepage, spillway blockage, etc.)
10.5.2.4 Risk of deterioration
10.5.2.5 Approximate storage pond elevation
10.5.2.6 Weather conditions
10.5.2.7 Other pertinent information.
If the dam incident is reclassified as a dam failure then immediate notification is to be made as shown.

<table>
<thead>
<tr>
<th>Failure Mode</th>
<th>Emergency Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Embankment Overtopping</strong></td>
<td>1. Determine what is causing the overtopping; spillway blockage or erosion of the dam’s crest.</td>
</tr>
<tr>
<td></td>
<td>2. For spillway blockage remove debris with excavator if route to spillway is accessible. If route is not accessible then the storage pond water level will have to be lowered with pumps prior to gaining access to area of blockage.</td>
</tr>
<tr>
<td></td>
<td>3. If erosion has occurred from a storm event and the result is a dam breach, the storage pond water level may have to be lowered with pumps to allow access or coarse rockfill may have to be placed in the breach to provide some resistance to further erosion.</td>
</tr>
<tr>
<td></td>
<td>4. The site has a Godwin HL250 m diesel pump on-site and pipeline capable to pump the WSP to the main pit. A Tsurumi 6110 submersible backup pump is also available.</td>
</tr>
<tr>
<td></td>
<td>5. Ensure that a coarse rockfill source is identified for easy access and ensure that the equipment (loader, rock truck, dozer and excavator) required to load, haul, and place are available on-site.</td>
</tr>
<tr>
<td></td>
<td>6. Ensure that the proper steps are being taken to minimize the potential for fatalities downstream. The access road downstream will have to be closed and monitored (radio contact) to ensure that no one is downstream of the dam.</td>
</tr>
<tr>
<td></td>
<td>7. Continue use of the storage pond at a reduced level until repairs can be made.</td>
</tr>
<tr>
<td><strong>Piping through the embankment</strong></td>
<td>1. Try and identify the location of the piping through the embankment.</td>
</tr>
<tr>
<td></td>
<td>2. The storage pond level will have to be lowered to a safe elevation in an appropriate time period as determined by the Geotechnical Engineer qualified for dam safety work.</td>
</tr>
<tr>
<td></td>
<td>3. The site has a Godwin HL250 m diesel pump on-site and pipeline capable to pump the WSP to the main pit. A Tsurumi 6110 submersible backup pump is also available.</td>
</tr>
<tr>
<td></td>
<td>4. Ensure that the proper steps are being taken to minimize the potential for fatalities downstream. The access road downstream will have to be closed and monitored (radio contact) to ensure that no one is downstream of the dam.</td>
</tr>
<tr>
<td></td>
<td>5. Continue use of the storage pond at a reduced level until repairs can be made.</td>
</tr>
<tr>
<td><strong>Piping through the foundation</strong></td>
<td>1. Try and identify the source location of the piping through the foundation.</td>
</tr>
<tr>
<td></td>
<td>2. The storage pond level will have to be lowered to a safe elevation in an appropriate time period as determined by the Geotechnical Engineer qualified for dam safety work.</td>
</tr>
<tr>
<td></td>
<td>3. The site has a Godwin HL250 m diesel pump on-site and pipeline capable to pump the WSP to the main pit. A Tsurumi 6110 submersible backup pump is also available.</td>
</tr>
<tr>
<td></td>
<td>4. Ensure that the proper steps are being taken to minimize the potential for fatalities downstream. The access road downstream will have to be closed and monitored (radio contact) to ensure that no one is downstream of the dam.</td>
</tr>
<tr>
<td></td>
<td>5. Continue use of the storage pond at a reduced level until repairs can be made.</td>
</tr>
<tr>
<td><strong>Downstream slope instability</strong></td>
<td>1. Try and identify the cause for the instability on the downstream slope.</td>
</tr>
<tr>
<td></td>
<td>2. Depending on the location and what caused the instability, the affected area might not be directly related to the Dam’s structural integrity. If it looks as though the affected area might have some effect, then the storage pond level will have to be lowered to a safe elevation in an appropriate time period as determined by the professional engineer.</td>
</tr>
<tr>
<td></td>
<td>3. The site has a Godwin HL250 m diesel pump on-site and pipeline capable to pump the WSP to the main pit. A Tsurumi 6110 submersible backup pump is also available.</td>
</tr>
<tr>
<td></td>
<td>4. Ensure that the proper steps are being taken to minimize the potential for fatalities downstream. The access road downstream will have to be closed and monitored (radio contact) to ensure that no one is downstream of the dam.</td>
</tr>
<tr>
<td></td>
<td>5. Continue use of the storage pond at a reduced level until repairs can be made.</td>
</tr>
</tbody>
</table>
10.6 Tailings Management Facilities

10.6.1 Tailings management facilities at Minto Mine include the following:

10.6.1.1 Dry stack tailings storage facility (DSTSF)
10.6.1.2 Area 2 Pit tailings management facility (A2PTMF)
10.6.1.3 Main Pit tailings management facility (MPTMF)

10.6.2 All three tailings facilities are managed with specific Operations, Maintenance and Surveillance (OMS) manuals.

10.6.3 There are no emergency scenarios identified for the DSTSF.

10.6.4 The A2PTMF and MPTMF are tailings facilities in completed open pits and do not include dams.

10.6.5 Identified emergencies are limited to spills due to tailings pipeline failure and are responded to as per the Minto Spill Contingency Plan.
This page has been left blank
Appendix A: Emergency Contact Information

EMERGENCY CONTACT INFORMATION

LOCATION

Geographic Location (Datum is NAD 83)
Lat/Long: North 62 Degrees, 37.210 Minutes, East 137 Degrees, 14.042 Minutes
UTM: Zone 8V, Easting 0385371 Northing 6945190

DIRECTIONS

From Whitehorse, Head west on the Alaska Highway (Hwy #1), Turn North onto the Klondike Hwy (Hwy #2) towards Carmacks & Dawson City. Travel approximately 236km from the turn onto Hwy #2 to the Minto Mine turn off. Alternatively, it is located 73km north of Carmacks. Look for the sign for Minto mine, turn left and when you reach the river, wait for the barge or bridge attendant to give further instructions.

FREQUENCIES

<table>
<thead>
<tr>
<th>RADIO FREQUENCY</th>
<th>CHANNEL</th>
<th>RECEIVE</th>
<th>TRANSMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Road</td>
<td>16</td>
<td>162.075</td>
<td>167.055</td>
</tr>
<tr>
<td>Emergency</td>
<td>1</td>
<td>162.03</td>
<td>167.01</td>
</tr>
</tbody>
</table>

MEDICAL

For All Emergencies Announce “Code 1, Code 1, Code 1” On the Emergency Channel – Channel 1

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>PERSONNEL</th>
<th>COMPANY</th>
<th>PHONE #</th>
<th>EXT.</th>
<th>E-MAIL</th>
<th>RADIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispatch</td>
<td>Mill Control Room</td>
<td>Minto</td>
<td>604-759-0860</td>
<td>6353</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Safety / Emergency</td>
<td>Health and Safety Superintendent</td>
<td>Minto</td>
<td>604-759-4641</td>
<td>4641</td>
<td><a href="mailto:safety@mintomine.com">safety@mintomine.com</a></td>
<td>1</td>
</tr>
<tr>
<td>Safety/Medical</td>
<td>Medic</td>
<td>Minto</td>
<td>604-759-4644</td>
<td>4644</td>
<td><a href="mailto:safety@mintomine.com">safety@mintomine.com</a></td>
<td>1</td>
</tr>
</tbody>
</table>

OFF-SITE MEDICAL CONTACTS

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>PHONE NUMBER</th>
<th>ALTERNATE CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERGENCY Medical Evacuation by Air or Land</td>
<td>867-667-3333</td>
<td></td>
</tr>
<tr>
<td>Nursing Station - Pelly Crossing</td>
<td>867-537-4444</td>
<td>24 hrs/day</td>
</tr>
<tr>
<td>Nursing Station - Carmacks</td>
<td>867-863-4444</td>
<td>After hours call forwarding</td>
</tr>
<tr>
<td>Poison Control Centre</td>
<td>867-393-8700 / 800-567-8911</td>
<td>CANUTEC – 1-888-226-8832</td>
</tr>
<tr>
<td>Whitehorse General Hospital</td>
<td>867-393-8700</td>
<td>24hrs/day</td>
</tr>
<tr>
<td>Yukon Communicable Disease Control</td>
<td>867-667-8323</td>
<td></td>
</tr>
</tbody>
</table>

EVACUATION / RESCUE

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>PHONE NUMBER</th>
<th>ALTERNATE CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air North</td>
<td>867-456-8300</td>
<td>867-335-1210 24hrs/day</td>
</tr>
<tr>
<td>Alaska Structures - Carolyn Bishop</td>
<td>907-344-1565</td>
<td>425-802-4577 (anytime), <a href="mailto:cbishop@aks.com">cbishop@aks.com</a></td>
</tr>
<tr>
<td>Alkan Air</td>
<td>867-668-2107</td>
<td>24 hrs</td>
</tr>
<tr>
<td>Conservation Officer - Carmacks Dean McLean</td>
<td>867-863-2411</td>
<td>867-332-5083 cell</td>
</tr>
<tr>
<td>Coroner</td>
<td>867-667-5310</td>
<td></td>
</tr>
<tr>
<td>Forest Fire Reporting</td>
<td>888-798-3473</td>
<td>Carmacks Duty Officer – 867-332-1989</td>
</tr>
<tr>
<td>Hazardous Materials Emergency - CANUTEC</td>
<td>1-888-226-8832</td>
<td>613-996-6666</td>
</tr>
<tr>
<td>Helicopter - Trans North Helicopter – Astar B2, 206</td>
<td>867-668-2177, GM-867-335-1851, Chief Pilot-867-335-5523</td>
<td>24hrs/day</td>
</tr>
<tr>
<td>Helicopter - Capital Helicopters – 206, Astar B2</td>
<td>867-668-6200</td>
<td>24hrs/day</td>
</tr>
<tr>
<td>Mackenzie Petroleum</td>
<td>867-993-5445 - Dawson City</td>
<td>Steve - 867-993-3715 cell</td>
</tr>
<tr>
<td>North 60 Petroleum</td>
<td>867-633-8820</td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT</td>
<td>PERSONNEL</td>
<td>COMPANY</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>General Manager</td>
<td>Ron Light</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>David Crottey</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Mine Manager</td>
<td>Pooya Mohseni</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Mill</td>
<td>Javad Azanchi</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Environmental</td>
<td>Ryan Herbert</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Site Services - Maintenance</td>
<td>Martin Mann</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Site Services General Foreman</td>
<td>Todd Epps</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Darin Kennedy</td>
<td>Minto Mine</td>
</tr>
<tr>
<td>Pelly Superintendent</td>
<td>Jason Abel</td>
<td>Pelly Const.</td>
</tr>
<tr>
<td>Pelly General Foreman</td>
<td>Declan McGovern</td>
<td>Pelly Const.</td>
</tr>
<tr>
<td>Sodexo Manager</td>
<td>Kelly Friesen</td>
<td>Sodexo</td>
</tr>
<tr>
<td>Dyno Supervisor</td>
<td>Dale Wearmouth</td>
<td>Dyno Nobel</td>
</tr>
<tr>
<td>Dyno Supervisor</td>
<td>Cris Short</td>
<td>Dyno Nobel</td>
</tr>
<tr>
<td>Dumas Superintendent</td>
<td>Roger Gauthier</td>
<td>Dumas Mining</td>
</tr>
<tr>
<td>Dumas Superintendent</td>
<td>Frank Zimperi</td>
<td>Dumas Mining</td>
</tr>
</tbody>
</table>

**Mutual Aid**

<table>
<thead>
<tr>
<th>Company</th>
<th>Phone #</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>YWCHSB - Ron Ratz, Mine Rescue</td>
<td>867-456-6530</td>
<td></td>
</tr>
<tr>
<td>Coordinator</td>
<td>867-332-3589</td>
<td></td>
</tr>
<tr>
<td>Alexco Mine Manager – Ken Fedak</td>
<td>867-995-3113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ 250-977-5143</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No MR team available during winter months</td>
<td></td>
</tr>
</tbody>
</table>
# MINTO WATER STORAGE POND DAM EMERGENCY

## Owner

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Manager</td>
<td>Ron Light, CET</td>
<td>604-637-8165</td>
<td><a href="mailto:rlight@capstonemining.com">rlight@capstonemining.com</a></td>
</tr>
</tbody>
</table>

## Minto Mine Management

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Engineer</td>
<td>Kevin Cymbalisty, P.Eng.</td>
<td>604-759-0860</td>
<td><a href="mailto:kevinc@mintomine.com">kevinc@mintomine.com</a></td>
</tr>
<tr>
<td>Mine Manager</td>
<td>Pooya Mohseni</td>
<td>604-759-4651</td>
<td><a href="mailto:pooyam@mintomine.com">pooyam@mintomine.com</a></td>
</tr>
<tr>
<td>Mine Emergency Response</td>
<td>David Crottey</td>
<td>604-759-4641</td>
<td><a href="mailto:davidc@mintomine.com">davidc@mintomine.com</a></td>
</tr>
<tr>
<td>Qualified Dam Safety Prof. Engineer</td>
<td>Chad Cowan</td>
<td>867-668-9214</td>
<td><a href="mailto:Chad.Cowan@tetratech.com">Chad.Cowan@tetratech.com</a></td>
</tr>
<tr>
<td></td>
<td>Richard Trimble</td>
<td>867-668-9216</td>
<td><a href="mailto:Richard.Trimble@tetratech.com">Richard.Trimble@tetratech.com</a></td>
</tr>
</tbody>
</table>

## Emergency Contractors

<table>
<thead>
<tr>
<th>Service</th>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling</td>
<td>Midnight Sun Drilling Company Inc</td>
<td>867-335-1588</td>
</tr>
<tr>
<td>On-site heavy equipment</td>
<td>Pelly Construction</td>
<td>867-667-6161</td>
</tr>
</tbody>
</table>

## Official Contacts

<table>
<thead>
<tr>
<th>Service</th>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highways</td>
<td>Carmacks Office</td>
<td>867-863-6411</td>
</tr>
<tr>
<td>Highways</td>
<td>Stewart Crossing Office</td>
<td>867-996-6411</td>
</tr>
<tr>
<td>Police</td>
<td>Carmacks Office</td>
<td>867-863-2677</td>
</tr>
<tr>
<td>Police</td>
<td>Pelly Office</td>
<td>867-537-2677</td>
</tr>
<tr>
<td>Dam Safety Officer</td>
<td>Whitehorse Office</td>
<td>867-667-3104</td>
</tr>
<tr>
<td>Yukon Water Board</td>
<td>Whitehorse Office</td>
<td>867-456-3980</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satellite Phones</td>
<td>011-881-651-434-147</td>
</tr>
<tr>
<td>Control Room</td>
<td>011-881-641-436-239</td>
</tr>
<tr>
<td>Spare</td>
<td>011-881-622-452-217</td>
</tr>
</tbody>
</table>

*Last update March 2017*
# Appendix B: Emergency Response and Mine Rescue Personnel

## Emergency Response Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bustin, Chad</td>
<td>Minto Explorations</td>
<td>ERT</td>
</tr>
<tr>
<td>Bouchard, Jean-Marc</td>
<td>Dumas</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Christian, Tyler</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Cook, Melissa</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT/PCP-IV</td>
</tr>
<tr>
<td>Crottey, David</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue Instr/ERT/ EMR / Hazmat Ops</td>
</tr>
<tr>
<td>Cymbalisty, Kevin</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Darcy, Sean</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT/OFA 3/HazMat Ops</td>
</tr>
<tr>
<td>Dunfield, Steve</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT /Hazmat Ops</td>
</tr>
<tr>
<td>Faulds, Ryan</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Friday, Heather</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Hilderman, Corey</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Hosking, Roger</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Johansen, Dustin</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Lagarde, Jean</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Mann, Chris</td>
<td>Minto Explorations</td>
<td>ERT</td>
</tr>
<tr>
<td>Kelsey McKee</td>
<td>Minto Explorations</td>
<td>ERT/PCP-IV</td>
</tr>
<tr>
<td>Potvin, Dan</td>
<td>Minto Explorations</td>
<td>ERT</td>
</tr>
<tr>
<td>Prentice, Colin</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Ratte, Jason</td>
<td>Dumas</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Regina, Shawn</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Rookes, Kevin</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue Instructor/ERT/OFA 3</td>
</tr>
<tr>
<td>Sebok, Ferenc</td>
<td>Minto Explorations</td>
<td>ERT</td>
</tr>
<tr>
<td>Serelo, Dean</td>
<td>Pelly Construction</td>
<td>Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Silverfox, Ryan</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
<tr>
<td>Stewart, Dave</td>
<td>Minto Explorations</td>
<td>UG/Surface Mine Rescue/ERT</td>
</tr>
</tbody>
</table>
This page has been left blank
## Appendix C: Emergency Response Equipment

<table>
<thead>
<tr>
<th>Emergency Response Equipment</th>
<th>Location</th>
<th>Use Authorized By:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicles</strong></td>
<td>ERT Complex</td>
<td>Medic Emergency Response Coordinator Safety Manager / Officer ERT Captain</td>
</tr>
<tr>
<td>Minto Mine Ambulance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minto Mine Fire Engine 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minto Mine Hazmat Trailer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minto Mine Rope Rescue Trailer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minto Mine 4 Wheel Drive UGMR Trailer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medical Jump Kits</strong></td>
<td>Camp X 2 First Aid Room Medics room Ambulance</td>
<td>Medic</td>
</tr>
<tr>
<td><strong>Automated External Defibrillators</strong></td>
<td>ERT Complex First Aid Room Dumas Office Minto Ambulance</td>
<td>Anyone who is trained, when defibrillation is indicated</td>
</tr>
<tr>
<td>3 Semi-auto</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Pro with ECG Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Airway Management</strong></td>
<td>First Aid Room Jump Kits Minto Ambulance</td>
<td>Medic ERT Captain PCP</td>
</tr>
<tr>
<td>Oxygen Airway Adjuncts (OPA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasopharyngeal Airway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>King Extraglottic Airways</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spinal Precautions</strong></td>
<td>Minto Ambulance First Aid Room</td>
<td>Medic PCP ERT Captain</td>
</tr>
<tr>
<td>Spine Boards &amp; Head Blocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clamshell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stiff Collars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider Straps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KED – Vehicle extrication device</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Splints</strong></td>
<td>Minto Ambulance First Aid Room</td>
<td>Medic PCP ERT Captain</td>
</tr>
<tr>
<td>Regular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sager traction splint</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wound Management</strong></td>
<td>First Aid Room Jump Kits Minto Ambulance</td>
<td>Medic PCP ERT Captain</td>
</tr>
<tr>
<td>Burn Dressings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bandages &amp; Dressings</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Controlled Medication</strong></td>
<td>Jump Kits First Aid Room Ambulance</td>
<td>Medic OFA3 EMR/End’d OFA EMR/End’d OFA</td>
</tr>
<tr>
<td>OTC Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entonox</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPI Pens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventolin Neb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitro SL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epi IM/SC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcan SC/IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D10W IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.9% NaCl IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Response Equipment</td>
<td>Location</td>
<td>Use Authorized By:</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Dimenhydrinate IM/IV Tranexamic Acid</td>
<td></td>
<td>PCP, PCP</td>
</tr>
<tr>
<td>SCBA</td>
<td>ERT Complex &amp; Fire Engine 8</td>
<td>Medic, Emergency Response Coordinator, Safety Manager / Officer, ERT Captain</td>
</tr>
<tr>
<td>5- Scott 2.2-30 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 – Scott NxG7 4.5-60 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIT-Pak III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – Spare bottles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire/Rescue</td>
<td>Fire Engine 8</td>
<td>Safety Coordinator – Medic, Emergency Response Coordinator, Safety Manager / Officer, ERT Captain</td>
</tr>
<tr>
<td>Fully Equipped Fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine/Rescue/Tender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000’ 2.5” supply, 400’ 2.5” attack, 800’ 1.5” attack hose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chain, Cut-off, and Recip Saw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Stabilization, 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifting/Moving Bags &amp; Manifold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic Spreaders &amp; Jaws &amp; Accessories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forcible Entry tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piercing Nozzle, 4 Multi-gallonage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5” nozzles, 2.5” nozzle &amp; ground monitor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pro-Pak foam dispensers and PPV Fan, Generator and Flood Lights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Detection – Multi Detectors</td>
<td>ERT Complex Electronics Room</td>
<td>Medic, Emergency Response Coordinator, Safety Manager / Officer, ERT Captain</td>
</tr>
<tr>
<td>iNet System with 3 MX6 iBrid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 BW Gas Alert Micro 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Draeger Bellows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radios</td>
<td>ERT Complex Electronics Room</td>
<td>Medic, Emergency Response Coordinator, Safety Manager / Officer, ERT Captain</td>
</tr>
<tr>
<td>10 – Motorola Hand Held Radios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 VHF Air Band Transceiver Radio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Satellite Radios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rope Rescue Equipment</td>
<td>Rescue Trailer</td>
<td>Medic, Emergency Response Coordinator, Safety Manager / Officer, ERT Captain</td>
</tr>
<tr>
<td>2 Gear Bags, each equipped with 300’ static kernmantle, MPD, brake bar, Petzl ID, 540 Belay, PMP’s, carts, anchor plate, assorted webbing, anchor straps &amp; prusiks, 18 carabiners, and edge pro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Pulley Bag Equipped with 100’ Static Kernmantle, 2 Kootenay Carriages, 4 single &amp; 2 dbl Omni Blocks, 2 swivels, 4 Minders, 3 Twins, 2 Micros, Petzl ID, assorted webbing, anchors straps &amp; prusiks, 18 carabiners, and edge pro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Response Equipment</td>
<td>Location</td>
<td>Use Authorized By:</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Additional Gear</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona Vortex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cordless Hilti Hammer drill with expansion bolts and hangers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Aztek Kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Rescue Helmets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-600’ Poly-Ny Static Kernmantle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- 7/16 Polyester Static Kernmantle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-7/16 Poly-Ny Static Kernmantle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 other rescue ropes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ResQmax rope launcher with dryland and float ropes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Litters with spine boards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rescue harnesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rescue Pole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mule Litter Wheel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **NFPA Turn Out Gear**                              | ERT Complex      | Medic
| 24 sets including boots, gloves, Helmets and balaclavas. |                  | Emergency Response Coordinator
|                                                     |                  | Safety Manager / Officer
|                                                     |                  | ERT Captain                                           |
| **Hazmat Response Equipment**                       | Minto Mine Hazmat Trailer | Medic
| 24’ Hazmat trailer                                  |                  | Emergency Response Coordinator
| 10,000W generator                                   |                  | Safety Manager / Officer                              |
| A/C for responder rehab                             |                  | ERT Captain                                             |
| Protective clothing, sorbents, booms, Over pack, hand tools. |                  |                                                        |
| Enviro drum heli-portable vac unit                  |                  |                                                        |
| 2-2500 gal portable bladders                       |                  |                                                        |
| Rollover Kit                                        |                  |                                                        |
| Pipe Plug Kit                                       |                  |                                                        |
| Assorted Wooden Plugs & Plug N Dyke                 |                  |                                                        |
| Decon tarps, pools, tools, fittings                 |                  |                                                        |
| 50 gal of Acid neutralizer                          |                  |                                                        |
| Air compressor                                      |                  |                                                        |
| Diaphragm pump                                      |                  |                                                        |
| 2-trash pumps                                       |                  |                                                        |
| **Confined Space Rescue Gear**                      | ERT Complex      | Medic
| SKED Stretcher /Oregon Spin Splint                  |                  | Emergency Response Coordinator
<p>| Rescue Tripod / Ventilation Fan                     |                  | Safety Manager / Officer                              |
| 2-Cylinder Air Cart                                 |                  | ERT Captain                                             |
| 4 Ska Paks with 15 min btls                         |                  |                                                        |
| 2-100’ &amp; 4-50’ Airlines                             |                  |                                                        |
| Spec Pak                                            |                  |                                                        |</p>
<table>
<thead>
<tr>
<th>Emergency Response Equipment</th>
<th>Location</th>
<th>Use Authorized By:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underground Rescue Equipment</strong>&lt;br&gt;Draeger BG 4 CCBAs and all equipment to clean / test / refill&lt;br&gt;6 Ocenco EBA 6.5 Self Rescuers&lt;br&gt;MSA W65 Self Rescuers&lt;br&gt;Underground Camp Lamps&lt;br&gt;12 Miners Belts&lt;br&gt;Link Lines&lt;br&gt;1 complete rope rescue bag&lt;br&gt;1 Multi Gas Detector</td>
<td>ERT Complex</td>
<td>Medic&lt;br&gt;Emergency Response Coordinator&lt;br&gt;Safety Manager / Officer&lt;br&gt;Mine Rescue Captain</td>
</tr>
<tr>
<td>2 Stretcher Basket fully equipped</td>
<td>Refuge Stations</td>
<td>Medic&lt;br&gt;Emergency Response Coordinator&lt;br&gt;Safety Manager / Officer&lt;br&gt;Mine Rescue Captain</td>
</tr>
<tr>
<td><strong>• Inflatable Brattice with door - 5m x 5m, regulated remote fill stn &amp; 2-4500 psi air cylinders, airlines, mine air to airline adapters</strong>&lt;br&gt;<strong>• Angus Hi-Combat MkII high expansion foam generator</strong>&lt;br&gt;<strong>• High Ex Foam – 18 5gal pails</strong>&lt;br&gt;<strong>• Fire hose – 50’ x 2.5”, 850’ x 1.5” with mine water to fire hose adapters</strong>&lt;br&gt;<strong>• ProPak Direct Attack Foam Sys</strong>&lt;br&gt;<strong>• FireAide Class A/B foam – 2 pails</strong>&lt;br&gt;<strong>• 4 charged 20lb cartridge-activated DC extinguishers, 3 pails DC powder, 8 spare N2 cylinders</strong>&lt;br&gt;<strong>• Hand-op’d hydraulic ram kit</strong>&lt;br&gt;<strong>• 16.5’ telescopic ladder</strong>&lt;br&gt;<strong>• Fully equipped litter</strong>&lt;br&gt;<strong>• Fully equipped Jump Kit</strong>&lt;br&gt;<strong>• O2 Therapy Unit with Carevent-CA, BVM, OPA’s, PM’s</strong>&lt;br&gt;<strong>• Litter mule</strong></td>
<td>UGMR Trailer @ FAR Access Drift</td>
<td>UGMR Team</td>
</tr>
</tbody>
</table>
Appendix D: Mutual Assistance Agreement for Underground Mine Rescue

(Starts on next page)
MUTUAL ASSISTANCE AGREEMENT

In a Mine Emergency
Mine Rescue

Between

➢ Alexco Resource Corp. – Keno Hill Underground Mine Operations - Yukon
➢ Minto Explorations Ltd – Minto Mine - Yukon

Dated: July, 2016
Table of Contents

1.0 PARTICIPANTS ................................................................. 1
2.0 INTENT .............................................................................. 1
3.0 DEFINITIONS ..................................................................... 1
4.0 EMERGENCY PROCEDURES AND EQUIPMENT ................. 1
5.0 LIABILITY .......................................................................... 2
  5.1 INJURIES .......................................................................... 2
  5.2 EMERGENCY MATERIALS AND EQUIPMENT .................. 2
  5.3 TRANSPORTATION ............................................................ 2
  5.4 SALARIES AND BONUSES ............................................... 2
6.0 PERSONNEL AND EQUIPMENT REQUIREMENTS & AVAILABILITY ........................................................................ 2
7.0 AGREEMENT REVIEW ............................................................. 3
8.0 AGREEMENT CANCELLATION ................................................... 3
9.0 AGREEMENT ....................................................................... 3
1.0 PARTICIPANTS

<table>
<thead>
<tr>
<th>Alexco Resource Corp.</th>
<th>Keno Hill Underground Mine Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minto Explorations Ltd</td>
<td>Minto Mine</td>
</tr>
</tbody>
</table>

2.0 INTENT

During an underground emergency, two of the requirements to successfully complete the work are:

1) A sufficient number of trained emergency personnel,
2) An adequate supply of materials and equipment.

Each participant in this agreement recognizes that situations could develop where they may be unable to fulfill these requirements on their own.

This agreement gives any participant with a site emergency the opportunity to request assistance in the form of manpower and/or materials and equipment from one or all of the other participants.

3.0 DEFINITIONS

Throughout this agreement, references will be made with respect to the “host” and “visiting” mines and personnel. “Host” refers to the mine or project at which the emergency exists and “Visitor” refers to the mine(s) or project(s) assisting in the emergency.

4.0 EMERGENCY PROCEDURES AND EQUIPMENT

All participants with underground / tunnel operations conduct their mine rescue training and have set up their mine rescue procedures in accordance with the Yukon Occupational Health and Safety Regulations, as published by the Yukon Worker’s Compensation Health and Safety Board – or equivalent. It is recognized that each participant will have site-specific procedures and practices which will be explained to visiting personnel prior to them assisting in the emergency.

It is recognized that visiting emergency teams may have to be divided up and combined with host team members. The host mine / tunnel emergency personnel are totally familiar with their own operation, equipment and site layout and thus better able to direct a combined emergency team. This combination of teams will only occur if the teams are utilizing the same type of equipment and all members (host and visiting) are familiar with its use.
5.0 LIABILITY

5.1 Injuries
It is recognized that emergency work can be hazardous and there is the potential for team members to suffer injuries.

Each participant accepts the responsibility of ensuring their emergency personnel are covered by workers’ compensation benefits should an injury arise; and understands the consequences of one of their employees being injured while at another operation.

5.2 Emergency Materials and Equipment
It is recognized that expenses could be incurred by visiting participants in relation to equipment damage and the replacement of used materials.

Each participant agrees that the host mine or project will reimburse the visiting mine or project for all reasonable and actual costs in this regard, upon receipt of an itemized list of expenses.

5.3 Transportation
It is the responsibility of the visiting team to arrange their own transportation to the host mine or project site and every effort will be made to ensure this is carried out in an expeditious manner. The host mine or project may be able to assist in these arrangements by recommending local air charter firms.

Each participant agrees that the host will reimburse visiting mines for all reasonable and actual transportation costs, upon receipt of an itemized list of expenses.

5.4 Salaries and Bonuses
It is recognized that salaries and bonuses are each participant’s internal responsibility and no effort is made to standardize these within this agreement. All parties agree that salaries and bonuses paid would be reasonable recognizing the circumstances.

The host may request salary and bonus information during the initial request for assistance.

Each participant agrees that the host will reimburse the visitor(s) for all reasonable and actual salary and bonus costs, upon receipt of an itemized list of expenses.

6.0 PERSONNEL AND EQUIPMENT REQUIREMENTS & AVAILABILITY
It is recognized that an emergency, as it develops, will dictate the manpower and equipment needs. Therefore no participant will be expected to pre-determine their commitment to assist another mine or project.

8/4/2016
It is recognized that each participant must, upon a request for assistance, consider their own circumstances, risks and site coverage before committing manpower and equipment to another mine or project. Each participant has the right to decline assistance if they are unable to meet the expected obligations.

The host will ensure the following information is available and presented to a visiting team:

- Ventilation Schematic
- Property Layout Map
- Surface Workings Map
- Mine / Tunnel Layout and Infrastructure
- Communications System
- Electrical Single Line Diagram
- Secondary Escape and Refuge Station locations
- Copy of current Emergency Response Plan
- Inventory of Emergency Response Equipment

Appendix I lists site telephone numbers and head office numbers.

7.0 AGREEMENT REVIEW

Each participant agrees that periodically this mutual assistance agreement will be reviewed and any additions or omissions will be subject to the agreement of the participants.

8.0 AGREEMENT CANCELLATION

It is acknowledged that a participant can withdraw from this agreement at any time. If this is anticipated, it is requested that 30 days notice be given of such an action.

9.0 AGREEMENT

By the signing of this agreement each participant acknowledges they understand and will abide by the Agreement, and will make every effort to assist another participant if a serious emergency arises.
MUTUAL ASSISTANCE AGREEMENTS

ALEXCO RESOURCE CORP. - Keno Hill Underground Mine Operations
and
MINTO EXPLORATIONS Ltd – Minto Mine

Acknowledgements

Signed:

Brad Thrall
EVP and Chief Operating Officer
Alexco Resource Corp.

Signed:

Ron Light
General Manager, Minto Explorations Ltd
Minto Mine

Date

8-4-16
APPENDIX I – Emergency Contact Phone Numbers

Alexco Resource Corp.

- EVP and Chief Operating Officer – Brad Thrall (604) 633-4888 (work)  (604) 250-6501 (cell)
  - Mine Manager – Ken Fedak (867) 995-3113 (work) (250) 977-5143 (cell)
  - Site Manager – Peter Johnson (867) 995-3113 (work) (867) 335-7448 (cell)

Minto Explorations Ltd – Minto Mine

- General Manager – Ron Light (604) 759-4639 (work)  (613) 406-7810 (cell)
  - Mine Manager – Pooya Mohseni (604) 759-4651 (work) (604) 358-6375 (cell)
  - Health and Safety Superintendent – David Crottey (604) 759-4641 (work)

Yukon Workers Compensation Board – Mine Safety

- Switchboard & After Hours (867) 667-5450
  - Bruce Milligan, DOHS Yukon (867) 667-3726
  - Mike Henney, Chief Mines Safety Officer (867) 667-8739
  - Ron Ratz, Mines Safety Officer, & Yukon Mine Rescue Coordinator (867) 456-6530
Appendix E: Underground Ventilation Plan – Part 1/2

Date Plotted: March 14, 2017
Scale: 1:1100, 100m Gridline Spacing
Appendix E: Underground Ventilation Plan – Part 2/2

Date Plotted: March 14, 2017
Scale: 1:1100, 100m Gridline Spacing