



May 13, 2014

TO: BC MINING INDUSTRY

Mutual Aid Agreement Guideline

BACKGROUND

Mutual Aid is a predetermined relationship between parties (another mining operation, fire department or other rescue or technical resource), to mobilize emergency resources for additional emergency assistance. A Mutual Aid Agreement captures the preplanning information necessary to promote an effective and safe mutual aid response to support in the saving of lives.

Mine management is required to develop plans for emergency response as per Part 3.7.1 of the Health Safety and Reclamation Code¹. These plans include the steps taken upon the discovery of an emergency incident. Upon initial assessment of an emergency by a qualified person, successful actions to mitigate the emergency may reside within the scope of qualified persons and available equipment on-site. For example, where it is determined the status of an event involves short-term rescue work, back-up assistance may not be necessary. However, where a rescue is a high risk, such as, when entering an underground mine using breathing apparatus, or when there is an extended need for assistance, a back-up team remains at a fresh air base with additional teams available to maintain a continuous response. (Mine rescue teams train for a minimum of three teams for a continuous response with the addition of more teams if a response extends beyond 6-8 hours.) Please refer to the BC Mine Rescue Manual for additional information regarding the rotation of mine rescue teams during an emergency event.

Some mines, however, may not be required by the Code nor have the in-house capacity to provide additional teams. Mutual Aid Agreements with other mining operations may meet this need by providing access to pre-planned mobilization of additional mine rescue teams and equipment.

PURPOSE OF GUIDELINE

This guideline has been created with industry collaboration. It provides an outline of recommended elements of a mutual aid agreement necessary to promote an effective response, and coordination of emergency personnel and equipment in the event of a mining emergency. As each individual circumstance may vary, this guideline may not reference all the information that could be addressed in the Mutual Aid Agreement. It remains the responsibilities of each party to ensure they are satisfied with the agreement and that they seek their own independent legal advice as appropriate.

¹ Health Safety and Reclamation Code for Mines in British Columbia, 2008

For the purpose of mutual aid, a mine requesting mutual aid assistance shall be named the “requesting mine”. The mine providing assistance shall be called the “responding mine”. Responding mines will need information in advance to ensure they are appropriately equipped and educated on the risks which may be associated with providing rescue assistance at the requesting mine site. Information gathering and reciprocal mine visits will ensure both mines are well prepared in advance of requiring mutual aid.

By signing a mutual aid agreement, the mines represented acknowledge they understand the scope of a mutual aid response and agree to make every effort to assist when requested.

MUTUAL AID AGREEMENT CONSIDERATIONS

To assist those mines entering into a mutual aid agreement supporting underground mine rescue capability, TABLE 1 outlines information to be considered within a written agreement. Please also consider the following.

Forming of Agreement

- Contents of the mutual aid agreement should be agreeable to all signatories prior to signing;
- Those involved with the authoring and arrangement of mutual aid should be familiar with emergency response planning, the functions of mine rescue teams and Incident Command;
- The format of the written document is up to the authors but should be easy to read, follow and update;
- Mutual site visits are recommended for the purpose of preplanning and training for site specific conditions and hazards;
- The written agreement becomes a part of the Mine Emergency Response Plan as per Part 3.7.1 of the Code;
- An accessible, signed copy should be kept on file and training provided to those designated to activate mutual aid; and
- Mutual aid agreements may be limited in scope as not every eventuality may be anticipated.

Operations

- Upon arrival, responding mutual aid teams may be combined with site mine rescue personnel familiar with the operation; and
- Mine management of the requesting mine remains in command of the emergency event until such time command is delegated.

Agreement Review

- Mutual Aid agreements should be reviewed annually and resigned by all signing parties, and whenever there is a significant change to emergency response planning or operations that could affect effective mutual aid assistance; and
- Notification of a change to a mutual aid agreement should be made to the Chief Inspector.

Liabilities

- Costs associated with a response (such as travel, site support and equipment losses are the responsibility of the signatories to consider within the agreement); and
- Emergency work includes a potential for injuries of mine rescue team members; parties should seek advice from their independent legal counsel or WorksafeBC on matters pertaining to WorksafeBC responsibilities.

Agreement Cancellation

- Recommend that the agreement provide for the responding mine to decline the request for assistance, for whatever reason, if they believe they are unable to release a team(s) and corresponding equipment or to undertake an assigned task;
- Parties should consider a notice period of termination; sufficient notice should be considered; and
- Notification of a change to a mutual aid agreement should be made to the Chief Inspector/Regional Inspector.

Mutual Aid Procedure

- In addition to a signed, written mutual aid agreement, both mines should have a written procedure appropriate for their site and share the information accordingly. The procedure should address, but is not limited to, sections 2 and 4 through 9, of Table 1.

NOTES:

As Mutual Aid Agreements form a part of the Mine Emergency Response Plan, they shall also be filed with the Chief Inspector as per section 3.7.1 of the HSR Code.

The content of this document may not be all inclusive with respect to the components of a Mutual Aid Agreement. Parties should seek independent legal advice.

Thank you to representatives from Nyrstar Myra Falls, New Afton New Gold, Quinsam Coal Corp. and the Ministry of Energy and Mines, for contributions to this document.

TABLE 1 – SAMPLE COMPONENTS OF A MUTUAL AID AGREEMENT

Consider the following and include more detail where appropriate:

Pre-planning	
1. General Information 1.1. Type and mine design	<ul style="list-style-type: none"> · <i>company and mine site name</i> · <i>commodity mined</i> · <i>mine management contact information</i>
1.2. Workforce	<ul style="list-style-type: none"> · <i># employees in total work at site and shift schedules</i> · <i># employees per shift underground</i>
1.3. Location and general site features	<ul style="list-style-type: none"> · <i>Lat. and long. coordinates</i> · <i>elevation at mine site</i> · <i>surface access routes to the minesite</i> · <i>watercourses</i>
1.4. Underground or pit features	<ul style="list-style-type: none"> · <i>adit or shaft access</i> · <i>average temperature underground</i> · <i>ground quality</i> · <i>deposit characteristics; e.g. sulphide concentration, off-gasses</i> · <i>unusual water inundation</i> · <i>unusual air quality inundation</i>
1.5. Mining practises	<ul style="list-style-type: none"> · <i>mining methods: e.g. Cut and Fill, Longhole, Shrinkage, Room and Pillar</i> · <i>track or trackless</i> · <i>fill used underground: e.g. hydraulic or waste</i> · <i>air and water service: e.g. size of pipe and typical psi of each</i> · <i>surface water impoundments</i>
1.6. Maps	<ul style="list-style-type: none"> · <i>legend to assist in map interpretation</i> · <i>primary and secondary entrance and escape ways</i> · <i>intake and exhaust locations</i> · <i>location of all surface openings and elevations</i> · <i>type of primary fans and associated CFM</i> · <i>location of secondary fans underground</i> · <i>quantity and direction of ventilation flows of fresh air and exhaust routes on each level and location of primary fresh and return air raises or airways</i> · <i>all emergency man ways including distances</i> · <i>muster points</i> · <i>bulkheads and permanent stoppings</i> · <i>all refuge station locations</i> · <i>fuel transfer stations</i> · <i>powder and cap magazines</i> · <i>shops – fuel stations underground</i> · <i>underground water impoundments</i>

	<ul style="list-style-type: none"> · <i>all telephone locations</i> · <i>fire stations, hydrants and equipment</i> · <i>locations of automatic installed fire suppression systems</i> · <i>sectional maps of the mine showing all the different underground levels</i> · <i>all surface buildings and water impoundments</i> · <i>first aid Station and ambulance and fire hall location</i> · <i>mine rescue building</i> · <i>all entrances to the site</i> · <i>camp facilities including kitchen location</i> · <i>date of last update</i>
2. Proximity Information 2.1. Towns, hospitals	<ul style="list-style-type: none"> · <i>mine site location – complete with coordinates</i> · <i>road access characteristics and responsibility</i> · <i>nearest medical facility: distance, time by road, water and air</i>
2.2. Access; boat, helicopter pads, airports	<ul style="list-style-type: none"> · <i>availability of helicopter, air or boat access to site (complete with coordinates)</i> · <i>specific carrier information if available, including contact information</i>
3. Emergency Response Capability 3.1. Emergency response personnel & training	<ul style="list-style-type: none"> · <i>mine emergency coordinator contact information</i> · <i># trained mine rescue teams and personnel: total and onsite at all times</i> · <i>any trained surface emergency response team(s) on-site</i> · <i>confirm Incident Command System utilized onsite</i> · <i>gas testing instrument type and calibration capability</i>
3.2. First aid coverage	<ul style="list-style-type: none"> · <i>level of first aid on site</i>
3.3. Refuge stations	<ul style="list-style-type: none"> · <i>list each including capacity, associated supplies and services</i>
3.4. Breathing apparatus	<ul style="list-style-type: none"> · <i># certified breathing apparatus technician(s)</i> · <i># and type used</i> · <i># extra bottles</i> · <i>booster pump capable of filling O2 Cylinders to 3000 psi</i> · <i>other supportive equipment: e.g. dryer, filter pads, soda-lime, extra parts, ice</i> · <i>cleaning and sanitizing area available to service</i>
3.5. Firefighting	<ul style="list-style-type: none"> · <i>water supply and volume, underground and surface</i> · <i>fire-fighting water delivery to underground, surface</i> · <i># and type of fire trucks</i> · <i>type and size of water hose available: rated firefighting, other</i> · <i>type of water nozzles</i> · <i>foam generator or foam inductor on site</i> · <i>type of firefighting foam used and amount onsite</i> · <i># sets of turn out gear</i> · <i>type of portable fire extinguishers: refilling capabilities on site</i> · <i>list of automatic installed fire suppression systems</i>

3.6. Other rescue equipment	<ul style="list-style-type: none"> · <i>list all supplies as appropriate</i>
3.7. Communications	<ul style="list-style-type: none"> · <i>site and underground</i> · <i>telephone system and other means of communication</i> · <i>site cellular or satellite service</i> · <i>communication underground: e.g. telephone, leaky feeder</i> · <i>description of emergency signage and symbols including escape routes</i>
3.8. Onsite transportation	<ul style="list-style-type: none"> · <i>site ambulance</i> · <i># and type of vehicles for transporting patients or teams underground</i>
4. Procedure for Mutual Aid Mobilization	<ul style="list-style-type: none"> · <i>how and by whom a responding team will be requested to attend an emergency event</i> · <i>specific, but not limited to, sections 2, 4-9 in Table 1</i> · <i>transport of responding mine's team and equipment including timelines and alternate travel arrangements</i>
Once onsite:	
5. Incident Command Structure	<ul style="list-style-type: none"> · <i>persons in charge, in command</i> · <i>typically, mine management of requesting mine remains in command until such time command is delegated</i>
6. Designated Contact Person	<ul style="list-style-type: none"> · <i>such as the check-in coordinator as per ICS</i>
7. Accommodation	<ul style="list-style-type: none"> · <i>during operational hours and rest phases, includes food and other support</i>
Post-Incident	
8. Debriefing	<ul style="list-style-type: none"> · <i>including any involvement in investigations</i> · <i>Critical Incident Stress debriefing when and where necessary</i>
9. Return Travel Arrangements	<ul style="list-style-type: none"> · <i>to return responding teams and equipment</i>
10. Recovery Costs	<ul style="list-style-type: none"> · <i>may include, but are not limited to: travel, equipment damage or consumption</i> · <i>costs associated with a response are the responsibility of the signatories within the agreement</i>