

(Updated, 4/10/2001)

Attachment 3: Idaho BLM Underground Abandoned Mine Safety Assessment/Entry Protocol

1. Pre-entry Research:

! Compile information, publications, and historical records (especially maps) of the inactive/abandoned mine site and workings, including discussions with persons knowledgeable about the mine. **Note:** whenever the term “abandoned” mine is used in this “Protocol” it refers to **either** inactive or abandoned underground mines. **Abandoned** mines or prospects refer to those mine workings on federal lands where there is no current claimant/lessee/permittee. An **inactive** mine/prospect is a mine working that is not active, but there is a current claimant/lessee/permittee.

2. Notification & Communication Plan:

! Develop authorization/notification/communication plan, including a backup plan, emergency evacuation plan* and contact for mine rescue teams (Central Mine Rescue for most of Idaho: Bob McPhail **208-556-2225**; or **208-783-8881** at Sunshine Mine Security). (*Updated: 10/18/2002*).

* QSL (see definition below) will conduct annual training for all personnel approved for underground entry, including field manager and acting(s) and safety officer, for verification procedures on how to: 1) determine if there is an emergency, 2) if there is an emergency, attempt communication with persons underground, 3) decide whether to first **contact emergency contractor*** in case of obvious portal failure and/or alert/request Central Mine Rescue response and contact Sheriff’s Office. Special note concerning Central Mine Rescue’s emergency phone number at Sunshine Mine Security (783-1211): The Sunshine mine has closed but the phone number is still to be used until told otherwise since the mine will be on maintenance/standby status.

* Contractor Contact Specific to Coeur d’Alene Field Office (ID086): 1. **Obvious Portal Caving/Failure** - if area accessible by excavator (be sure to specify max bucket size) contact: Justin Wilbur, Kellogg @ 784-4020; Bob Rice, Silverton/Nabob Pine Creek @ 556-4695; Ron Rice, Rose Lake/Cataldo @ 682-3258 (H) or 753-6031 (B); Zanetti Brothers Inc., Osburn @ 752-1178. 2. **Internal Adit Caving/Failure** - access by LHD (load-haul-dump), small capacity (.5 to 1.5 yd) or Bobcat type equipment - concern with ventilation diesel/gas powered equipment, contact: Atlas Fausett Contracting, Osburn @ 556-1181.

3. Team Approach:

! A minimum 3-person crew (must have at least 2 going underground) with one person (attendant) remaining outside of portal is required. The outside attendant requirement can also be met by communication verification with Dispatch, through the use of radios or cell/mobile phones, where the **Dispatch link** becomes the “portal attendant.” If a portal attendant is used at the portal they should (may not always be possible at times in certain locations) have a radio or other communications link with Dispatch. In other words, if you do not have **clear** communication with Dispatch you **must** have an outside portal attendant. A 2-person crew exception, with both going underground (no outside attendant), will only be allowed where both have extensive experience, training, including being current with “Annual Refresher Training,” and the field manager makes special note of this with his/her approval signature. In either case the team safety leader will be a

“qualified” safety leader (QSL). A QSL for Idaho is: 1) a mineral examiner or person with underground mining experience, or individual who has had extensive experience/training with abandoned underground mine entry; 2) has met the BLM authorized entry requirements according to WO IM 2000-012, in draft; and 3) has demonstrated their proficiency in underground entry procedures and use of required PPE to the satisfaction of Idaho’s “Abandoned Mine Entry Program Lead.” A written notification will be sent to the QSL’s field manager to ensure the manager’s approval of entry meets Idaho’s team safety leader requirements.

4. **QSL Mine Entry Assessment:**

! Implement attached “authorization/notification/communication” plan (call or radio when going in and after you come out).

! In situations where the pre-entry research indicates extensive/complex mine workings the QSL, accompanied by an authorized experienced/trained person, will conduct a mine safety assessment of all workings that may need to be entered prior to leading other authorized employees underground. This includes monitoring air conditions, hazard identification, and risk prioritizing (indicating which hazards are most likely to be encountered at the site & which have greatest consequences). If the workings and risks are extensive, e.g., if they consist of more than the usual situation of a short to moderate drift, the pre-entry team should conduct a thorough pre-entry site visit, discuss the risks involved, and incorporate them into a Job Hazard Analysis (JHA). If the risks are high or extreme, other alternatives to underground entry must be considered for the other authorized employees.

5. **Tailgate Session:**

! Prior to leading any authorized employees underground, the QSL will conduct a “tailgate” session with authorized employees outside the workings. Inform the authorized employees of the potential/specific risks and hazards of the mine, particularly identify the highest risks, and indicate what needs to be done to minimize the risks. A sketch map of workings and hazards, if available, may be helpful to conduct the tailgate session.

! Document the hazards and action on a JHA (add them to general JHA). All participants acknowledge the hazards and risks by signing the JHA.

6. **Bottom Line:**

! You, as the QSL, are the safety officer while underground. You are responsible for ensuring all workers follow safe working practices. You make all decisions related to safety and all others must follow your decisions (except, of course, if a person feels uncomfortable or does not feel an area is safe to enter). No one will be directed to enter an abandoned mine if that person believes that unsafe conditions exist or if that person is uncomfortable doing so for whatever reason. No authorized employee or contractor will be disciplined for declining to enter an underground abandoned mine or to serve as an underground safety lead (WO IM 2000-012, in draft).

! QSL uses scaling bar to “sound” back and ribs (we recommend minimal scaling of rock, only as last resort if you cannot walk safely under or around potential falling hazard) as well as probe in front, especially when encountering pools of water. Continual monitoring of air - be aware of stratified air conditions. Use the “miner’s walk,” i.e., personnel placed far enough apart to minimize the number involved in potential accidents (rock fall, for example) but close enough to communicate.

! Use same practices and precautions leading authorized employees out of mine as QSL did leading them into mine.

! Be sure you implement your communication plan.

Other Details:

! Include health risks and abatement actions in the tailgate JHA. This includes risks associated with acid mine drainage water, metals availability and pathways into bodies from waste rock dumps and tailings, and hantavirus. Examples of abatement actions are using goggles while working in acid waters and washing equipment and PPE. We recommend that you include surface workings/features and associated hazards in your JHA such as shaft collars, buildings, and unstable ground.

The combined authorization/notification/communication plan and completed/signed JHA constitute the Confined Space Entry Permit for underground abandoned mine entry. Posting of the completed permit will be accomplished by placing it in a vehicle at the mine entry site. Remember to keep a copy of the permit for at least one year to facilitate the review of the confined space program.