

**Attachment D**  
**Initial Interview Protocol**

Mine Leadership/Safety Management Interview (Initial Interview) Protocol: At each of the two mines, approximately 3 leadership and mine personnel (for a total of 6) will participate in an initial interview. An initial interview could require approximately 1.5 hours of participation per participant.

1. Obtain verbal participant consent and document their agreement to participate; provide them with the Informed Consent document
2. Record the names of the researchers conducting the interview
3. Record location of interview
4. Record date of interview
5. Researchers introduce themselves
6. Background on gOE-Aptima-Consultant team
7. Reason for this discussion and purpose of the project
8. Record participant ID coding

Public reporting burden of this collection of information is estimated to average 1.5 hours per interview response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-XXXX).

## **Mine Leadership/Safety Management Interview Protocol (Initial Interview)**

In the event of mine disaster that requires evacuating the mine, we want to be sure all mine personnel leave the mine safely, so we are interviewing leadership and mine personnel to learn how we can improve the ability of miners to self-escape.

We'd like to learn as much as we can about how mine evacuation **should** take place, including some of the **best practices** mines are using to prepare miners and mitigate any potential risks.

We believe you have a great deal of knowledge about what should happen and how you would want your mine leadership and mine crews to respond.

Time permitting I'd like to talk with you about a few of the following:

- A. What should happen during evacuation or **self-escape**
- B. The greatest **risk points** as you see them
- C. Training and **preparation** of mine management, safety managers, and miners
- D. Ideas and suggestions for **preventing and reducing** risks

We are not evaluating you or the mine in any way. Our sole intent is to learn about how self-escape should work so we can identify effective practices to share with others, along with ideas for improving the process.

When we summarize our results, we will not share anything that is attributable to you by name. At the end of the entire project, we will provide an outbrief of findings to the mine.

At any point you can request that your comments not be recorded.

Any questions before we begin?

## A. Self-Escape/Evacuation

1. Let's assume a decision has been made to **evacuate** the mine due to [*a fire, an explosion, impoundment failure/liquid or gas inundation, rockburst/coalburst/roof fall*]. Please help me understand what would happen once the decision has been made.
  - What happens at that point?
  - Then what happens? [Have them talk about what would happen in chronological order during the evacuation process using some of the probes below]

Potential Probes include:

- What would **you** be doing at that point? What would you be thinking about? What are you concerned about and monitoring? What decisions need to be made? Where are you located to deal with this situation?
  - What would the **other leaders** be doing? What are they paying attention to and who are they talking with?
  - As the disaster unfolds, who has the **most complete picture** of what is happening?
  - What **information or updates** do you need from the managers and mine personnel?
  - What communications, if any, are occurring with corporate personnel (if applicable)?
  - What are other **mine personnel** doing at this time? For example, what are team leaders (section supervisors) doing? What is the safety/compliance officer doing? What are miners doing?
  - What equipment is being assembled topside, if any?
  - What happens if miners are injured?
  - What notifications have to be made to others (e.g., corporate, NIOSH, mine rescue team, local first-responders)?
  - How do we **track** where miners are at this point? What should we do if some miners aren't accounted for?
  - What are the greatest **risks or challenges** at this point? What could hinder miners from performing their roles successfully? What could go wrong?
  - If a challenge or problem emerged, what would be the **best way** to handle it?
2. We are also interested in evacuation at the **team level**. In an evacuation, are escape teams formed and how might they differ from their mining teams?
    - How do supervisors account for all miners in their charge?
    - If a smaller group of miners finds itself cut off from their team leader – what happens? Does someone **assume leadership**? Are there established protocols for that?
    - Are individuals **assigned to evacuation roles** as “backup” in case the first person can't perform that role? If not, how would that happen?
    - Do they **notify** anyone?
    - What roles are **critical** during an evacuation situation?

## B. Greatest Risk Points

3. In general, where do you see the **greatest risk points** or challenges that could interfere with miners being able to safely self-escape? Do these differ among the four disaster scenarios?
  - What are ways to **prevent or mitigate** these challenges?
  - As necessary, probe about the following:
    - Miner readiness and preparation
    - Gaps between what miners are capable of doing and the demands of self-escape
    - Communications between the mine leadership and team leaders/crew members; between miners
    - Equipment challenges
    - Interactions with the topside/rescuers
    - Existing policies or procedures
    - Conditions (e.g., power outage, radio/comm failure, miner injuries, shift change)
4. What does your mine **do particularly well** to prepare for evacuations?
  - What would you recommend all mines do to be prepared for and if necessary, to handle an evacuation successfully?

## C. Training and Preparation

### Mine Leadership/Safety Managers

5. What type of **training, preparation, and drills** do mine managers/safety managers participate in to prepare them for an evacuation?
  - When did you experience this? What was the purpose of the training/drill/material? How was it delivered?
  - What are some of the best training experiences, drills or other forms of preparation related to evacuation that you've experienced? What made them particularly useful?
  - How often and when do these training experiences/drills typically take place?
6. What is the role of the mine's senior leaders/safety managers **during mine evacuation** drills?
  - What, if anything, do you or the leaders need to do to prepare for the drills?
  - Do you get any feedback about the drill? What, if anything, do you or the leaders do with the results from the drill?

### Miners

7. What type of training do miners receive regarding evacuation?
  - Please describe each (how often does this training take place, what is done to prepare for the training, what happens during the training, what happens after the training)
    - Note: consider whether/how the training provides information to trainees, demonstrates behavior, allows for practice, and provides feedback individually or through a debrief, etc.
  - Do miners train or drill with those on their shift?

- What are the learning objectives of that training? [collect any documentation about the objectives, and training methods/materials]
- How were the training requirements determined?
- Any use of videos, readings, or computer-based training?
  - What is done after the training or drill to track, capture or share lessons learned?
- What ideas do you have for improving training?

8. What **obstacles or challenges exist** that can interfere with evacuation training?

#### **D. Ideas and Suggestions**

9. What **changes**, if any, would you recommend that might help **improve** mine and miners readiness to handle an evacuation?
- Any changes to training, equipment, communications, worker roles, etc.?

**THANK YOU VERY MUCH!**