

JWR Mine Rescue Contest April 30th Statement

Thank you for responding to our call for help. I will be your superintendent and Command Center spokesman for this problem. Last night 4 men were sent to this section. Two were to do clean up and straighten the faces up with the miner. A CO technician and a laborer were to finish establishing communication to the section for the tracking system.

Around 3:00 AM this morning the control room operator noticed a sudden decrease in the fan pressure. The outside electrician was at the fan and noticed the same thing. He panicked and turned off the fan. After realizing what he had done he tried to restart the fan but could not do so. An evacuation was started after 15 minutes. A fireboss was sent to the section to contact the four men and evacuate them from the mine. He has not been heard from. All miners had been accounted for except the four miners missing on this section and the fireboss. Two others and I were sent to the section. Upon arriving at this point we found damaged ventilation controls, low oxygen and high accumulations of methane and did not feel safe to continue beyond this point.

You will be the first team inby this point. All other areas have been evacuated and all other miners have been accounted for. All areas outby this point may be used for ventilation.

The fan has been repaired and has been restarted. It is an exhaust fan and air is coursing from #1 entry to the #3 entry. It may not be stopped, stalled, or reversed.

The CO technician had established communication for the tracking system and the last report received from the system indicated that three of the miners were located in the #1 entry near the 3rd and 4th crosscuts. We have lost communication with the system at this time.

That is all the information we have at this time. Maps of the area will be furnished after starting the time clock. The maps are up to date. Good Luck

JWR Problem Statement April 30th

Establish communication with the superintendant before going inby the Fresh Air Base.

Report the condition of the missing miners to the superintendant as they are found and before leaving that team stop.

Rescue any survivors

Explore the entire mine if it can be done safely

Patient response behind the unsafe roof:

Help, help, get me
out.

Patient Response in the RA:

Help, help, get me
out. I am OK.

Superintendent Check List

1. Did the B.O. establish communication before the team went inby the fresh air base? _____

2. Did the team report the condition of the following?

The live conscious person in the refuge chamber? _____

The unconscious person behind the barricade? _____

The person located behind the unsafe roof? _____

The body inby the evidence of fire placard? _____

(If so the team failed to withdraw correctly, -30 for continuing)

Judges Instructions

The team has four minutes to ready their equipment, read the statement and start the clock. The time starts when the first team member steps into the Fresh Air Base. If the team does not start the clock in four minutes you are to start the clock for them and discount them accordingly. (2 discounts Rule 50)

The team must enter the #2 entry. At the first team stop inby the FAB an apparatus check is required before they leave that stop. (1 discount Rule 2)

The team may choose to travel either way because of the contaminates in 1 and 3 entries. Since the crosscut to 3 is open the team will probably travel to #3. After completing that team stop the team will be required to return to #2 entry and either travel up #2 or airlock to #1. If the team advances up #3 they should be discounted for unsystematic because of the gas in #1 (4 discounts Rule 45). They now know the extent of the gas in #3.

If the team travels up #2, they find the refuge alternative with a low oxygen, explosive mixture lying into a caved area. The team can never ventilate that mixture through the caved and must immediately remove the man from the refuge alternative. Before leaving with the person they must report his condition to the superintendant (written instructions 15 point discount). Discount the team for delay if they do not immediately recover the person (6 discounts Rule 42).

When the captain and another team member enter the RA, they must open the door; make a gas check inside the airlock compartment. After finding the low oxygen inside the airlock they must close the door and purge the airlock. After 5 seconds you should turn over the gas placard. Another gas test must be made inside the second compartment. The captain or other team member must do a patient assessment. On a conscious patient they only have to ask are you okay or alright (2 point discount Rule 12). The recovered miner must be protected from the outside atmosphere by a Carevent or apparatus. Discount the team as necessary. (10 discounts Rule 34)

After the team takes the patient outside the team may explore to team stop 4 or airlock to #1. If they go to team stop 4 before going to #1 they must return to #2 and airlock to #1 before advancing in by the second crosscut.

(unsystematic 4 discounts Rule 45)

The team should explore to team stop 6 making the proper test at each stop. At this point the team knows the extent of all gases and is free to advance in any entry they so choose.

Once the team examines the third crosscut all the way across (stops 7, 8, and 9), the team must ventilate the barricade. See the ventilation map for required ventilation builds. Team must block air from migrating around blocks of inby areas (one build required). The team must block irrespirable gases from going through unexplored areas. (Rule 30 F. 5 points for each missing person $(4) \times \#$ of areas (possibly two) \times number of mixtures (possible three).

When ventilating the team must ensure that the explosive/irrespirable mixture in the 3rd crosscut of #3 entry does not move through the caved areas or over the battery scoop or the explosive extending into the caved just in by #3 entry is moved. These two gases cannot be moved, discount Rule 31 A and C ($\#$ of mixtures (2 possible) \times $\#$ of areas (3 possible) \times 30 point discount.

When the team ventilates the irrespirable mixtures the atmospheres must travel past the Briefing Officers location. The team must go out and build the ventilation structure at the Fresh Air Base. The Briefing Officer must be inside his designated location. If the BO builds the stopping, discount under rule 36 (10 discounts) \times (2 possible).

When the team enters the barricade they will find an unconscious patient in the intersection and a person yelling at them from behind the unsafe roof. The captain or another team member must perform a patient assessment on the unconscious person. They must ask are you okay or alright and verbalize looking for absence of breathing or gasping (2 discounts Rule 27). Pay close attention to where the team last stopped. The captain can only travel 25' from his or the #5 team members stopping point Rule 29 (2 discounts). Be sure about the stopping point of the captain. If they can reach the man yelling from that stop, they may set the timbers and recover the person. The team must call out the condition of the persons found before leaving that team stop (written instructions 15 discounts).

When the captain reaches the evidence of fire (12 ppm Co) he must stop, date and initial his farthest point of advance, and leave the mine. He does not know if there is a clear air separation between the explosive in #3 and the evidence of fire. The team cannot explore any other areas that they have not been to after finding the withdraw condition. If he steps past the placard the team should be discounted, rule 31 B (30 discounts). If he did not go to the face of #1 a D&I is required at the farthest point of advance (2 point discount Rule 27).

When the team retreats to the fresh air base the captain must stop the clock when ready. No work can be done on the maps after the clock is stopped. The only comparison of the maps can be done through radio communication from a team member to the B.O. If team members yell at the BO the team should be discounted (Rule 18) unless voice communication has failed and the team reverts to standard lifeline signals.

When the captain stops the clock take up the maps immediately. Be sure the BO has the proper map. If not mark it as the BO. One of the judges should take a team member and mark the ventilation map. Only mark airtight structures as left by the team.