Nationwide Mine Rescue Skills Championship

October 2010 Ruff Creek • PA

MTTC
Problem Statement

I am ___________ Superintendent of Deep Dog No. 7 drift mine and thank you for responding to our call for help. You are located on the surface. Last night at 12:01AM, 3 men were given instructions by their shift foreman to travel to No. 1 section. They were instructed to install additional roof supports and service the equipment on the section. At 6AM one of the men called the mine dispatcher and said that there was a fire on the section. He also said that he was by himself and did not know where the other 2 miners were located because of smoke. He said he was going to look for them and that he needed help immediately. This is the last communication we have had with anyone on the section.

The dispatcher contacted the Responsible Person for the shift who in turn called me. We immediately notified the agencies of the situation and they should arrive shortly. The Responsible Person has removed everyone from the mine except for the 3 miners on the section. We also have 2 mine rescue teams ready for backup while you are underground.

The exhaust fan is off and can be turned on by asking me. The exhaust fan cannot be reversed.

We have an airshaft in the no.1 entry that was just completed and can be used for ventilation if you need it. The exact location of the airshaft will be given to you when you start the clock. Deep Dog is a new one unit mine that is being developed and plans to have two more units in the near future. I have 2 up-to-date maps of the mine that will be given to you when you are ready. This is all the information I have at this time.
ACCOUNT FOR ALL MISSING MINERS

THE EXHAUST FAN CANNOT BE STOPPED OR STALLED AFTER TURNING ON
Roof & Rib Test

Gas Tests = GT

Date & Initial = DI

Continuous Miner

6 foot Air Shaft
CH4 5.1%
O2 19.4%
CO 9 PPM

Help! It's airtight behind me!

Used SCSR
CH4 5.1%
O2 19.4%
CO 9 PPM

Battery Ram Car

AXE

Battery mine phone

Roof Bolter

CH4 1.1%
O2 19.8%
CO 5 PPM
Unconscious

Unsafe Rib
Lunch Box

Battery Ram Car

1.1% CH4
19.1% O2
4 PPM CO
Remove 4 timbers and add body for Division 1 teams

Caved
Help! Get me out!

Battery Man Trip on Fire
Caved Air Tight

Exhaust Fan OFF
This vent will end problem for Division 1 Teams
PATIENT STATEMENT
BEHIND TEMPORARY STOPPING

HELP! GET ME OUT!

PATIENT STATEMENT
BEHIND BARRICADE IN NO. 3 ENTRY

HELP! IT’S AIRTIGHT BEHIND ME!
Keys to Problem

- Team cannot stall or turn fan off after starting
- Team must keep air from being pulled from airshaft during entire problem
- Follow containments for correct team stops during the problem
- Team must build in the right sequence to maintain airlock
- Do first aid assessment on unconscious miner behind barricade
- Team does not have to explore last intersection in no.1 entry
- Team must put FPA on team map if last intersection in no.1 entry is not explored
- Division 1 Teams cannot compare maps after 2nd vent
- Division 2 Teams cannot compare maps after 3rd vent
- At this contest, teams could travel over the top of the overcast. That is why team stop 5 is located at this area.