WKMI

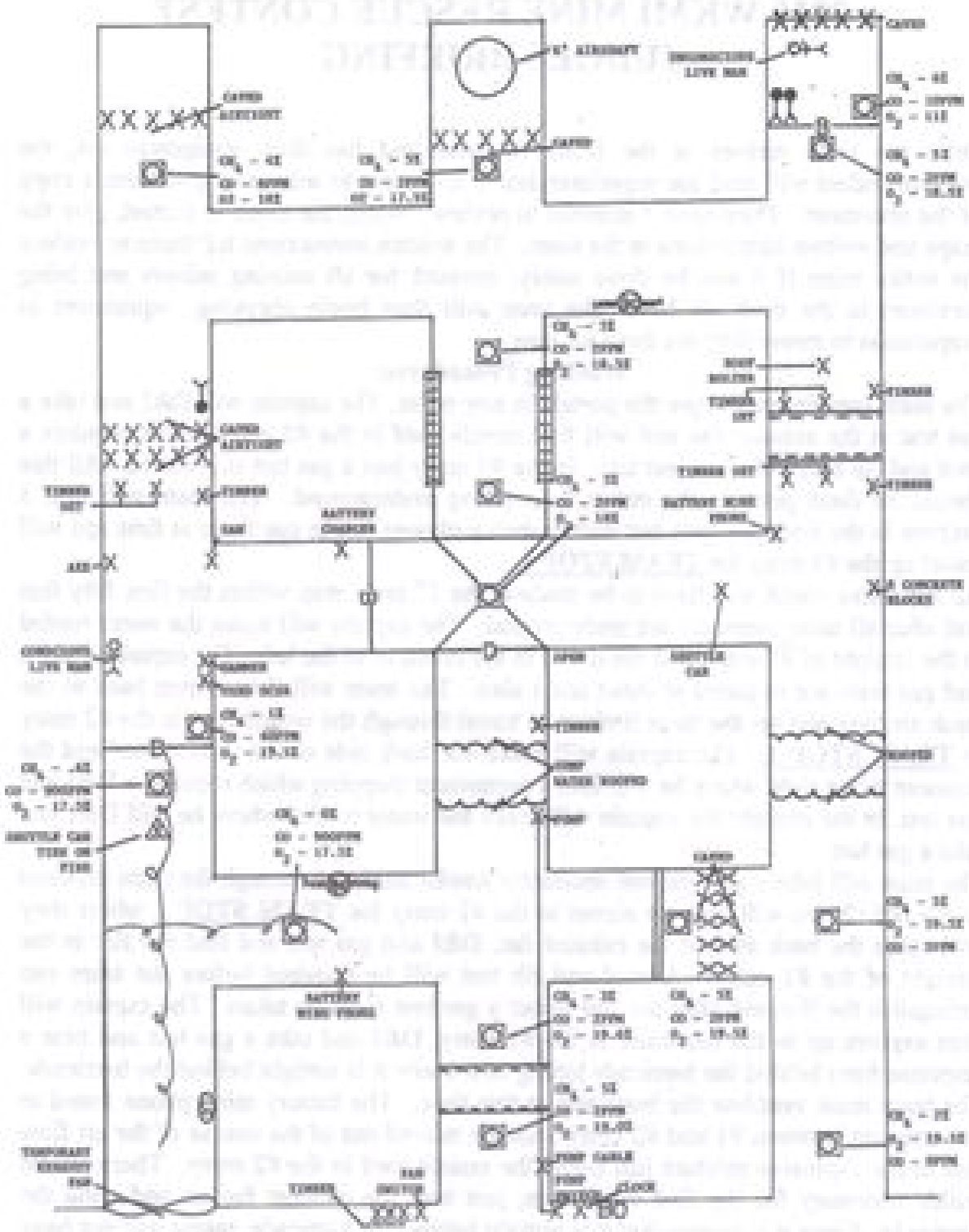
Mine Rescue Contest

May 26, 2010

We Train So Others May Live!

WKMI SAFETY DAYS
May 26, 2010

Good Morning. I am _____superintendent of the Madisonville Coal Company, Drake & Boone Mine. Thanks for answering our call for help. We had a four man crew and a foreman who went in at midnight to do routine idle shift work. They were supposed to clean and rockdust the section, check permissibility and if they had time, run some coal. We have been unable to contact anyone underground since I arrived this morning. This mine has been hampered by unsafe roof and water. The mine liberates approximately 500,000 cubic feet of methane in 24 hours. You are now located on the surface of this new highwall mine. The temporary exhaust fan located in #1 entry is currently off but can be started if needed, but once started it cannot be reversed or stopped. Yesterday we mined into the 6 foot airshaft located in the face of #2 entry. The airshaft is indicated on your maps that are up-to-date except for what was run last night. The underground power has been locked out and is currently guarded, however the fan and pumps can be energized if necessary by utilizing the switches on the surface. We have a trained mine rescue team here to serve as your back-up. We have a lifeline man here to handle your lifeline. (Point Him Out). This is all the information I have at the present time. You may have a copy of this statement if you like. You will have 5 minutes to review.



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2010 WKMI MINE RESCUE CONTEST
JUDGES BRIEFING

Once the team arrives at the fresh air base and has their equipment set, the Superintendent will read the superintendant's statement to team and give them a copy of the statement. They have 5 minutes to review. When the clock is started, give the maps and written instructions to the team. The written instructions tell them to explore the entire mine if it can be done safely, account for all missing miners and bring survivors to the fresh air base. The team will then begin checking equipment in preparation to travel inby the fresh air base.

Working Procedures:

The team captain may make the portals in any order. The captain will D&I and take a gas test at the exhaust fan and will find unsafe roof in the #2 entry which requires a roof and rib test, D&I and gas test. In the #3 entry just a gas test is required. All this should be done prior to the entire team going underground. The team will find 3 timbers in the fresh air base but will probably choose not to use them at first and will travel up the #3 entry for **TEAM STOP 1.**

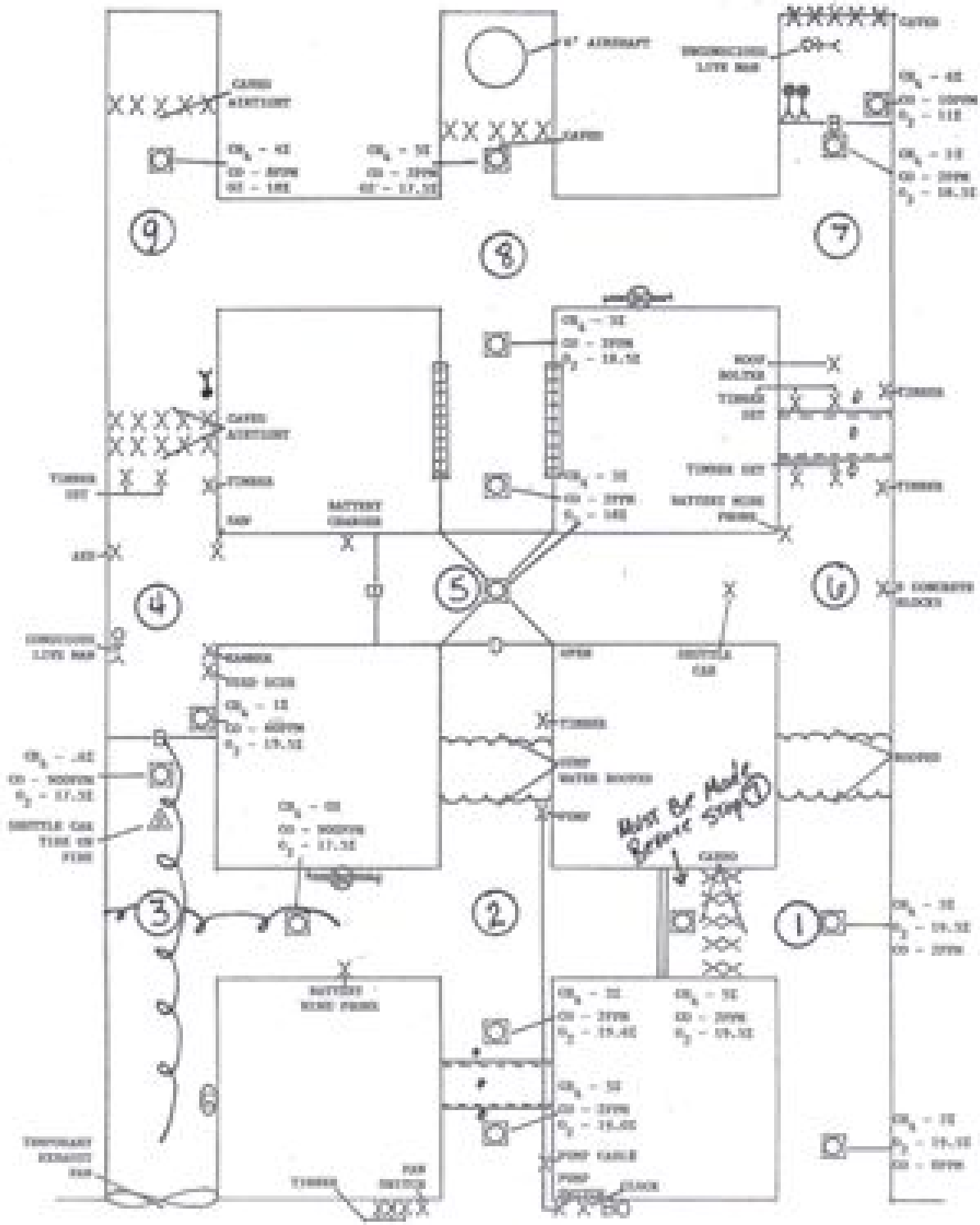
An apparatus check will have to be made at the 1st team stop within the first fifty feet and after all team members are underground. The captain will make the water roofed in the straight of #3 entry and the caved in the crosscut to the left. The captains D&I's and gas tests are required at these areas also. The team will then retreat back to the fresh air base and set the three timbers to travel through the unsafe roof in the #2 entry to **TEAM STOP 2.** The captain will make the back side of the unsafe roof and the crosscut to the right where he will find a permanent stopping which requires a D&I and gas test. In the straight the captain will make the water roofed where he will D&I and take a gas test.

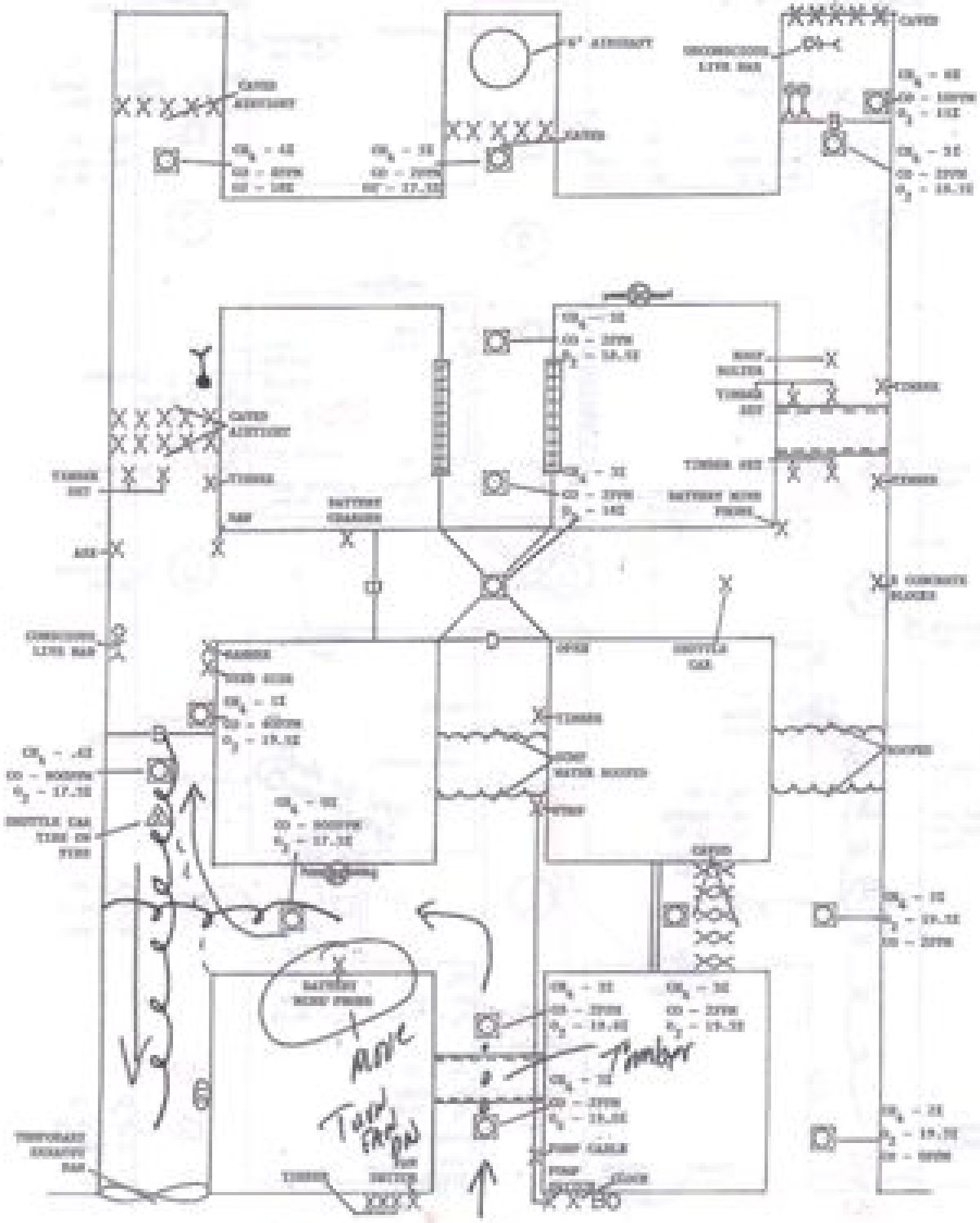
The team will take a gas test and encounter smoke half way through the open crosscut to the left Team will then tie across to the #1 entry for **TEAM STOP 3** where they will make the back side of the exhaust fan, D&I and gas test and find the fire in the straight of the #1 entry. A roof and rib test will be required before the team can extinguish the fire and after the fire is out a gas test must be taken. The captain will then explore up to the barricade in the #1 entry, D&I and take a gas test and hear a response from behind the barricade letting him know it is airtight behind the barricade. The team must ventilate the barricade at this time. The battery mine phone found in the crosscut between #1 and #2 entry must be moved out of the course of the air flow due to the explosive mixture just outby the unsafe roof in the #2 entry. There are no builds necessary for the first ventilation, just turn the exhaust fan on and wing the barricade. Since it is known that it is airtight behind the barricade, teams will not have to build to enter, just a gas test by the captain just inby the barricade. The team will then advance to **TEAM STOP 4** which is the second crosscut in the #1 entry where they will find the conscious live man.

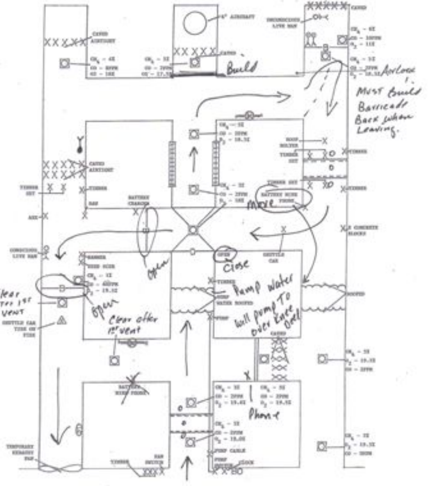
The captain will D&I the patient and will do the quick patient assessment required for a conscious live person. While the team puts an apparatus on the patient (due to the 60 ppm Co), the captain will probably do a roof and rib test at the caved air tight in the straight of #1, take a gas test and D&I, and then make the back side of the barricade in the crosscut between the #1 and #2 entry, D&I and take a gas test there also. The team will then bring the patient to the fresh air base and return to the #4 team stop where they will have to air lock to tie across to the second crosscut in the #2 entry for **TEAM STOP 5.** At this stop the captain will D&I the walls of the overcast and gas tests must be taken at each wall also. The outby door is open in the overcast so the captain will make the back side of the water roofed, D&I and take a gas test. The team will then tie across to the second crosscut in the #3 entry for **TEAM STOP 6.** The captain will make the back side of the water roofed in the #3 entry, D&I and take a gas test and then in the straight of the #3 entry do a roof and rib test at the unsafe roof, D&I and take a gas test there also. At this point the judges need to make sure that the area between #2 and #3 entry in the first crosscut has been made, the team will have to air lock and make the small area to the back side of the caved area. If the #5 man passes the corner on the inby rib at team stop #6 without this area being made then the team exceeds their two crosscut limit. Teams should have found a timber at team stop #4, #5 and #6. This will allow the team to timber through the unsafe roof inby the second crosscut in #3 entry to **TEAM STOP 7.** At this stop the team will find the second barricade inby the third crosscut in the #3 entry. The captain will D&I the barricade and make a gas test. A gas test is required in the crosscut to the left between #3 and #2 entry also. There is no response at the barricade so the team is not tied to this barricade and since they cannot ventilate at this point will continue to explore and will tie across to the third crosscut in the #2 entry for **TEAM STOP 8.** Inby this crosscut the team will find the caved area in front of the air shaft, this **MUST** be built off before the second ventilation due to the explosive mixture that extends into the caved area. The captain will D&I the caved and do a roof and rib test, a gas test must be done also. Outby team stop #8 the captain will make the back side of the overcast do a D&I and take a gas test. A gas test is also required in the crosscut to the left between the #1 and #2 entry. Since the team is not tied to the barricade in the #3 entry they will probably tie across to the third crosscut in the #1 entry for **TEAM STOP 9.** At this team stop the captain will find the caved airtight toward the face area where he will do a roof and rib test, D&I and take a gas test. When tying back in the #1 entry toward the back side of the caved air tight the team will find a body, which requires the captain's D&I. The captain will then make a roof and rib check at the caved air tight, D&I and take a gas test. Now that the entire mine has been explored the team is ready to do the second ventilation. As stated earlier teams will have to build off the air shaft or it will pull an explosive mixture through the caved area. Also the phone in the #3 entry just inby the second crosscut must be moved out of the course of the airflow due to the explosive mixtures being ventilated out. Teams must pump the water roofed in the #2 entry just inby the first crosscut. Once the pump is started, turn the placard over.

It will say pump stopped, water over knee deep. If both sides of this water roofed were made by the team then no air lock is needed to pump the water. The team must build in the first crosscut between the #1 and #2 entry and close the door in the overcast. As soon as the water is pumped down the air will travel straight up #2 entry, go over the overcast to the last open crosscut in the #2 entry. Then turn to the right to the #3 entry and ventilate the barricade and go outby to the second crosscut in the #3 entry, turn and go under the overcast in the #2 entry to the second crosscut in the #1 entry and travel straight outby in the #1 entry to the exhaust fan. Teams must air lock to enter the barricade in the #3 entry. The captain will make a gas check just inby the barricade where he will find two bodies and one unconscious live man. The captain must D&I the two bodies and the unconscious live man. A patient assessment is also required for the unconscious live man. An apparatus is needed on the patient due to the low oxygen found behind the barricade. While the team puts the apparatus on the patient and loads him on the stretcher the captain will make a roof and rib at the caved at the face and take a gas test. Teams will have to air lock out of this barricade due to the caved in the face area to bring the patient to the fresh air base.

TEAM STOPS




Timber
1ST VENT


CAVED AIRTIGHT
6" AIRSHAFT
CAVED
Build
UNCONSCIOUS LIVE MAN
CAVED
Airlock
MUST Build Barricade Back when Leaving.
ROOF BOLTER
TIMBER SET
TIMBER
BATTERY CHARGER
BATTERY WIRE PHONE
Move
AXE
CONSCIOUS LIVE MAN
2 CONCRETE BLOCKS
HAMMER
WIRE NUTS
Open
OPEN
Close
SHUTTLE CAR
Clear After 1st Vent
Open
Clear after 1st vent
SHUTTLE CAR TIRE ON FIRE
PUMP
WATER ROOFED
Pump water will pump To over knee deep
ROOFED
BATTERY WIRE PHONE
Phone
PUMP CABLE
TEMPORARY EXHAUST FAN
TIMBER
FAN SWITCH
PUMP SWITCH
CLOCK

2ND VENT