

# WKMI SAFETY DAYS



MAY 24, 2017

# NATIONAL MINE RESCUE

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May 24, 2017

Thank You for answering our call for help! You are located on the surface of our new highwall mine, The WKMI #1 Mine. Here is what we know at this time.

Early this morning three people went in to work on some areas of unsafe roof and check the water that we had accumulating in the face of the #2 entry at the end of second shift yesterday. I arrived about an hour ago and noticed that the exhausting fan was not running. I checked the fan and it appears that we had a surge and it has stalled out. The maintenance foreman has checked it out and said that the fan appears to be ready if and when ever you need it, He has also disconnected the power going underground and it is locked out & being guarded.

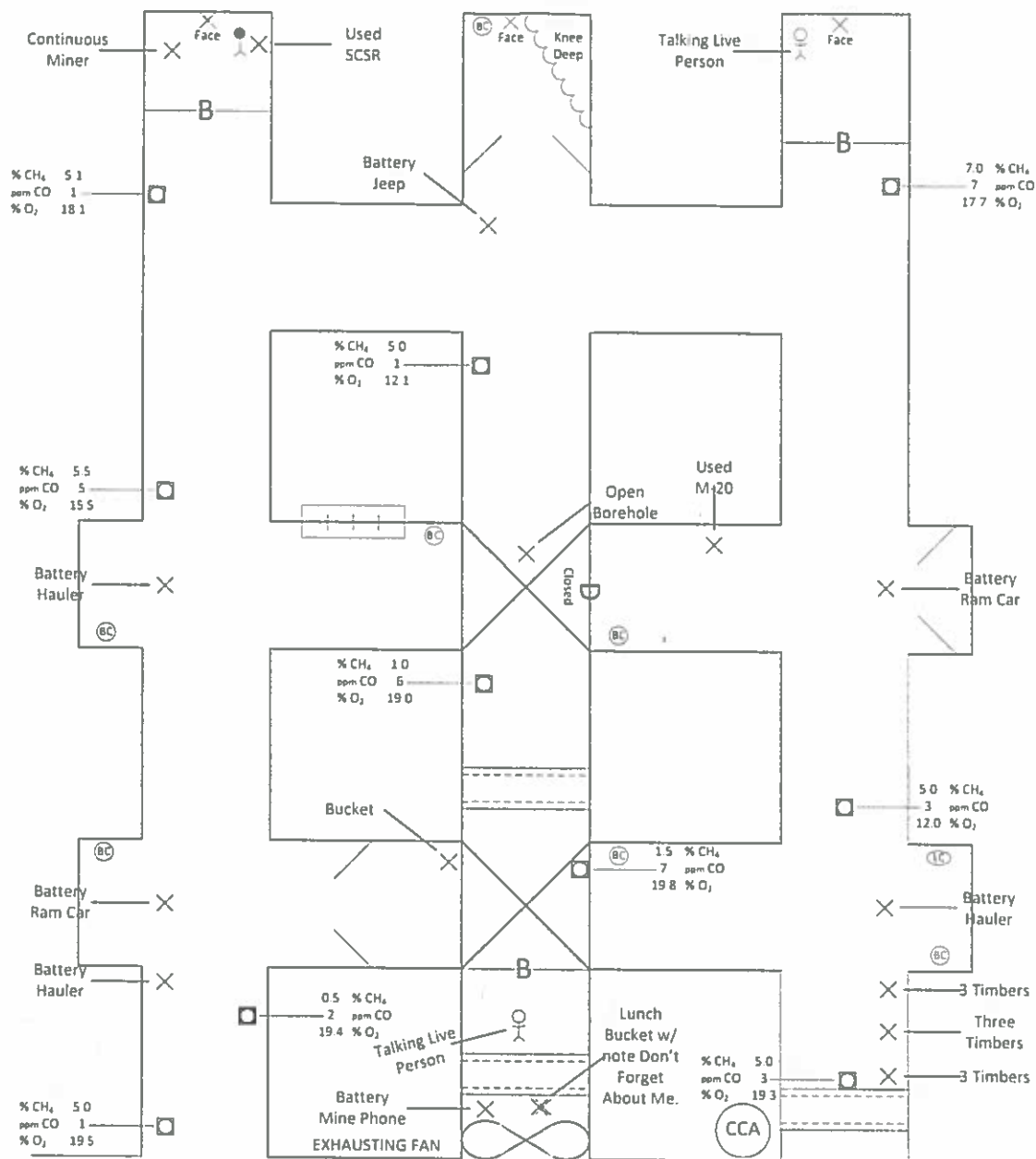
I tried to enter the mine but I encountered low O<sub>2</sub> in the #1 entry, I couldn't get by the fan in the #2 entry, and there was unsafe roof in the #3 entry. I have not been able to contact anyone underground. So I call for the Mine Rescue Teams and notified all Appropriate Agencies and they are present.

GOOD LUCK

# **MINE RESCUE**

## **WRITTEN INSTRUCTIONS**

- **ACCOUNT FOR ALL MISSING PERSONS**
- **BRING SURVIVORS TO THE SURFACE**
- **FAN CAN BE STARTED BY REQUESTING IT TO BE TURNED ON BY THE COMMAND CENTER / BRIEFING OFFICER**
- **ONCE THE FAN IS STARTED IT CANNOT BE STOPPED, STALLED OR REVERSED**
- **LEAVE THE MINE FOR READY FOR BAREFACE RECOVERY IF IT CAN BE DONE SO SAFELY**
- **YOU MAY ONLY TRANSPORT 3 CURTAINS AT A TIME. THE CURTAINS MAY NOT BE THROWN OR KICKED TO ANOTHER LOCATION**
- **THE TEAM MUST NOTIFY THE COMMAND CENTER BEFORE PUMPING ANY WATER**

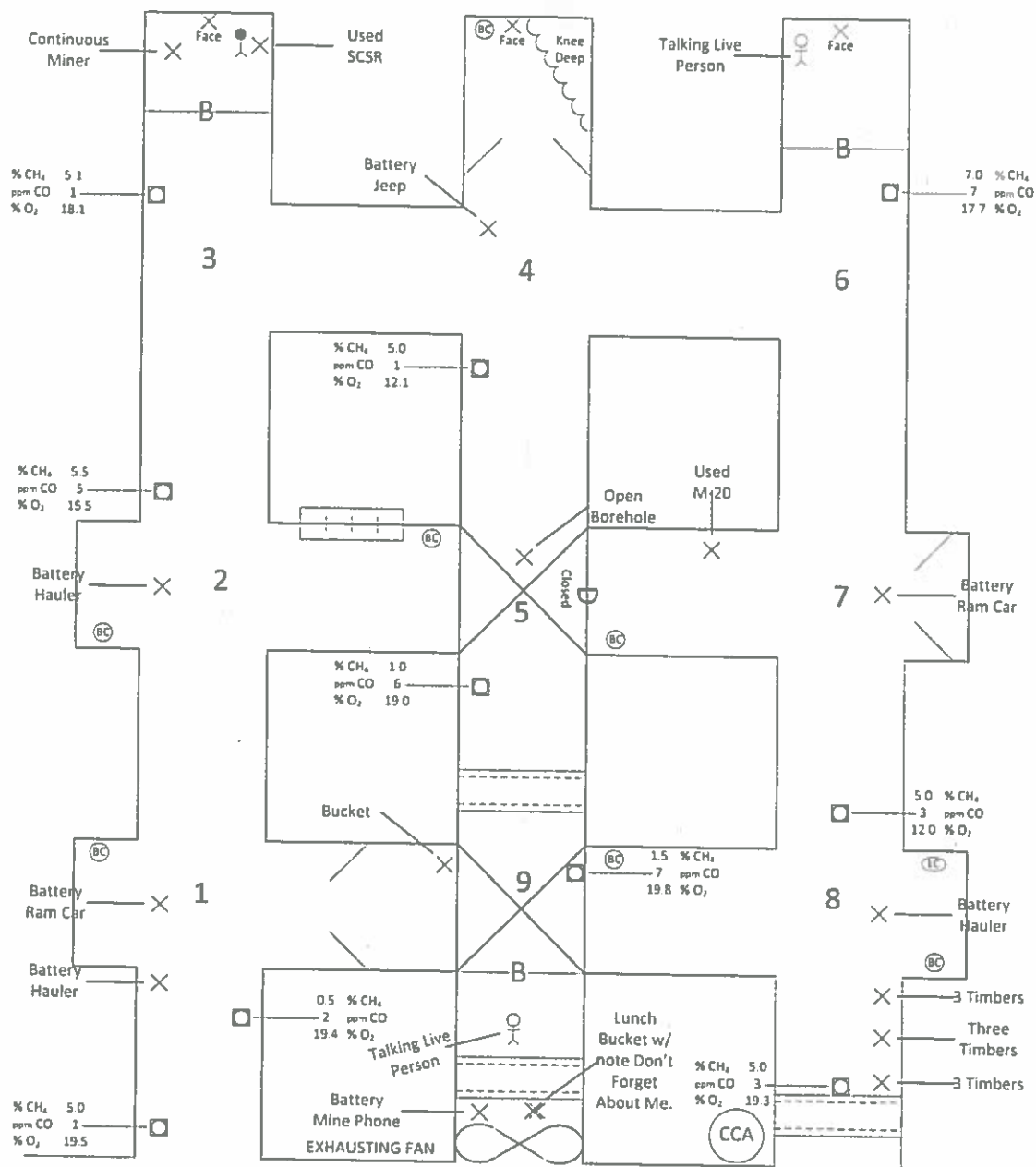


# TEAM

PROBLEM MAP

## **KEYS TO THE PROBLEM**

1. The patient by the fan will be the first patient brought out, but the team will have to advance to team stop eight before they will find the timbers to get to him.
2. To get the patient by the fan all the team has to do is air lock outby the unsafe roof and go in and get the patient. They must put some type of respiratory protection on the patient in order to remove them.
3. The best way to remove the second patient is to put some type of respiratory protection on them and bring them out the #3 entry. (The patient may be brought out the #1 entry but the diagonals in the #3 entry must be torn down first to short circuit the air) When the team ventilates the second barricade all of the mine should have been made including the unsafe in the #3 entry.



# TEAM

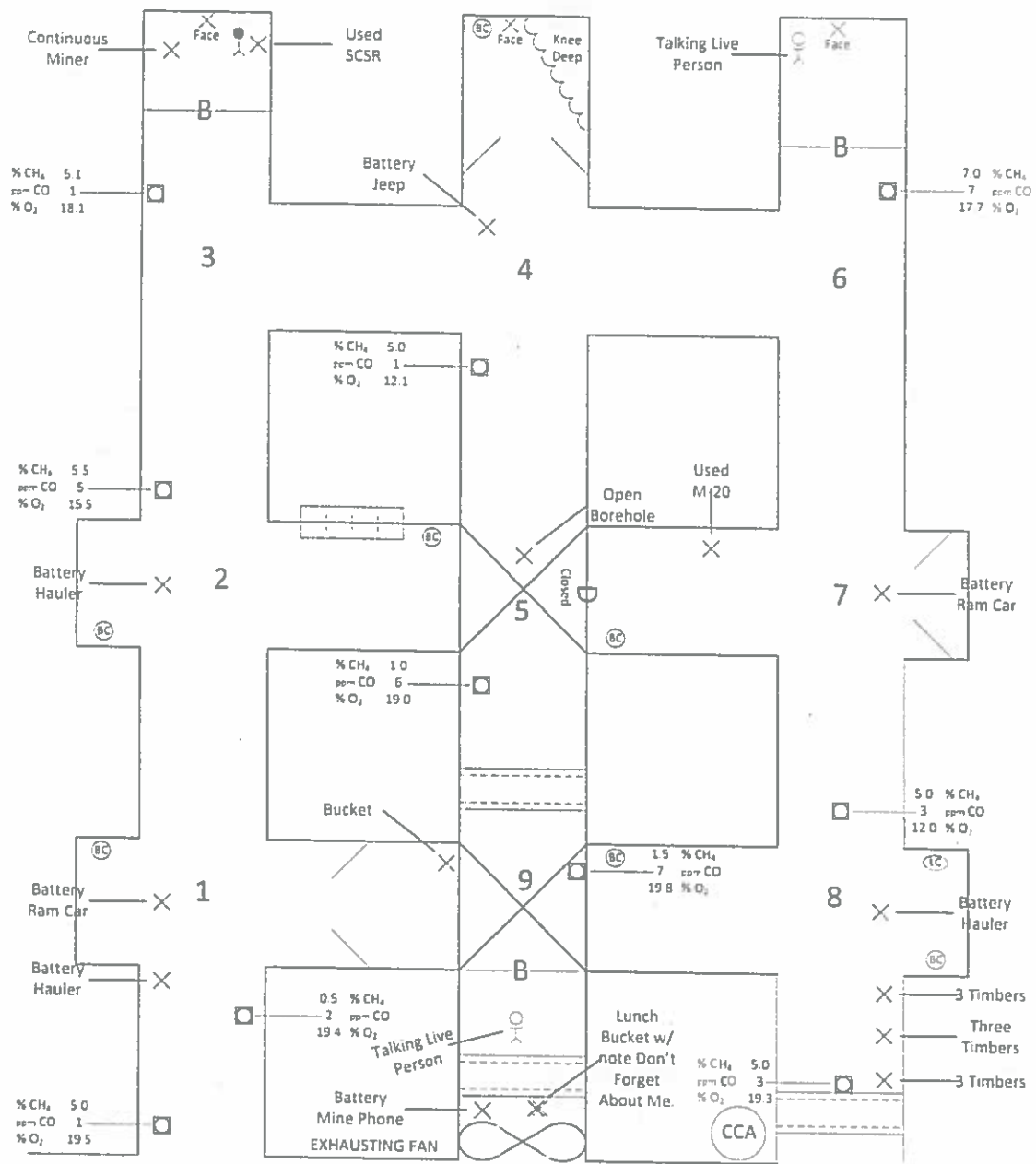
TEAM STOP

## **WORKING PROCEDURES:**

When the team enters the Fresh Air Base, the Superintendent will introduce himself and the other judges to the team captain. The Briefing Officer and the Command Center Attendant will report directly to the command center. The team will then have 4 minutes to arrange their equipment, lay out their lifeline etc. If the team captain does not start the clock within 4 minutes the Superintendent will start the clock. The team does not have to unload and test stretchers. They must however check their gas detectors after the clock has started as well as their communications between the team and the command center. Teams must go over standard lifeline signals with the lifeline judges unless wireless communications are used. Time for the briefing officer and the command center attendant to get set up is included in the 4 minute time.

### **F.A.B.**

The team is located on the surface of an underground highwall mine. The captain should make the three entrances prior to the team going underground. In the #1 entry he will find an explosive gas extending to a non-explosive and irrespirable gas. A GT is required in this area. The captain will find a battery hauler on the left rib. In the #2 entry, the captain will find an exhausting fan that is off the captain's D&I and a GT is required at this location. (When the captain checks the fan the patient in by the unsafe roof will respond, "Help, Help, get me out of here, the top is getting bad.") In the #3 entry, the captain will encounter unsafe roof across the entry where an R&R, the captain's D&I are required at the unsafe roof and a gas test is required in this area.



# TEAM

TEAM STOP



### **TEAM STOP #1**

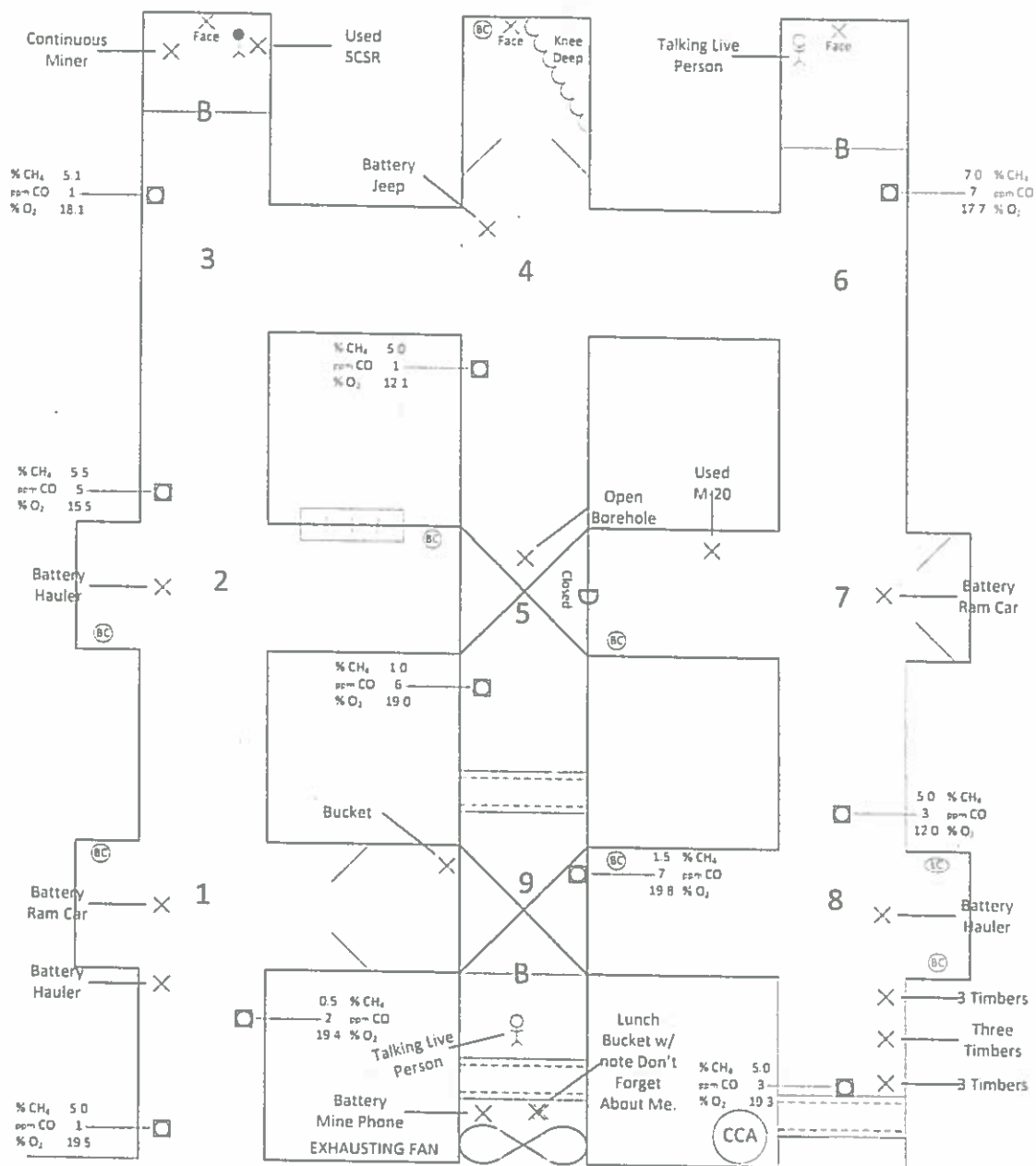
At team stop #1, an apparatus check must be made with all team members underground. The captain will find a battery ram car in the intersection, to the left the team will find a brattice cloth in a notch, a R&R and the captain's D&I are required at this location, and a GT is required in this area, inby the intersection in the #1 entry the captain will not find anything, and a GT is required in this area. To the right the captain will find a temporary stopping not intact, a bucket on the inby rib, and the wall of an overcast, the captain's D&I and a GT is required at this location. (At the wall of overcast the patient inby the fan will respond, "Help, Help, get me out of here the top is getting bad.")

### **TEAM STOP #2**

The team should travel up the #1 entry, on the left the team will find a brattice cloth in a notch, a R&R and the captain's D&I are required at this location, and a GT is required in this area. In the intersection the team will find a battery hauler, inby the intersection the team will find an explosive & irrespirable gas extending into the next intersection, to the right the team will find an unsafe rib on the inby rib line, just past that the team will find a brattice cloth, then the wall of an overcast, the captain's D&I and a GT is required at this location.

### **TEAM STOP #3**

The team will travel inby to the LOCC, inby the team will find an explosive & irrespirable gas extending to a barricade (With No Response.) The captains D&I & a GT are required at this location. A GT is required in the area to the right.



# TEAM

TEAM STOP

#### **TEAM STOP #4**

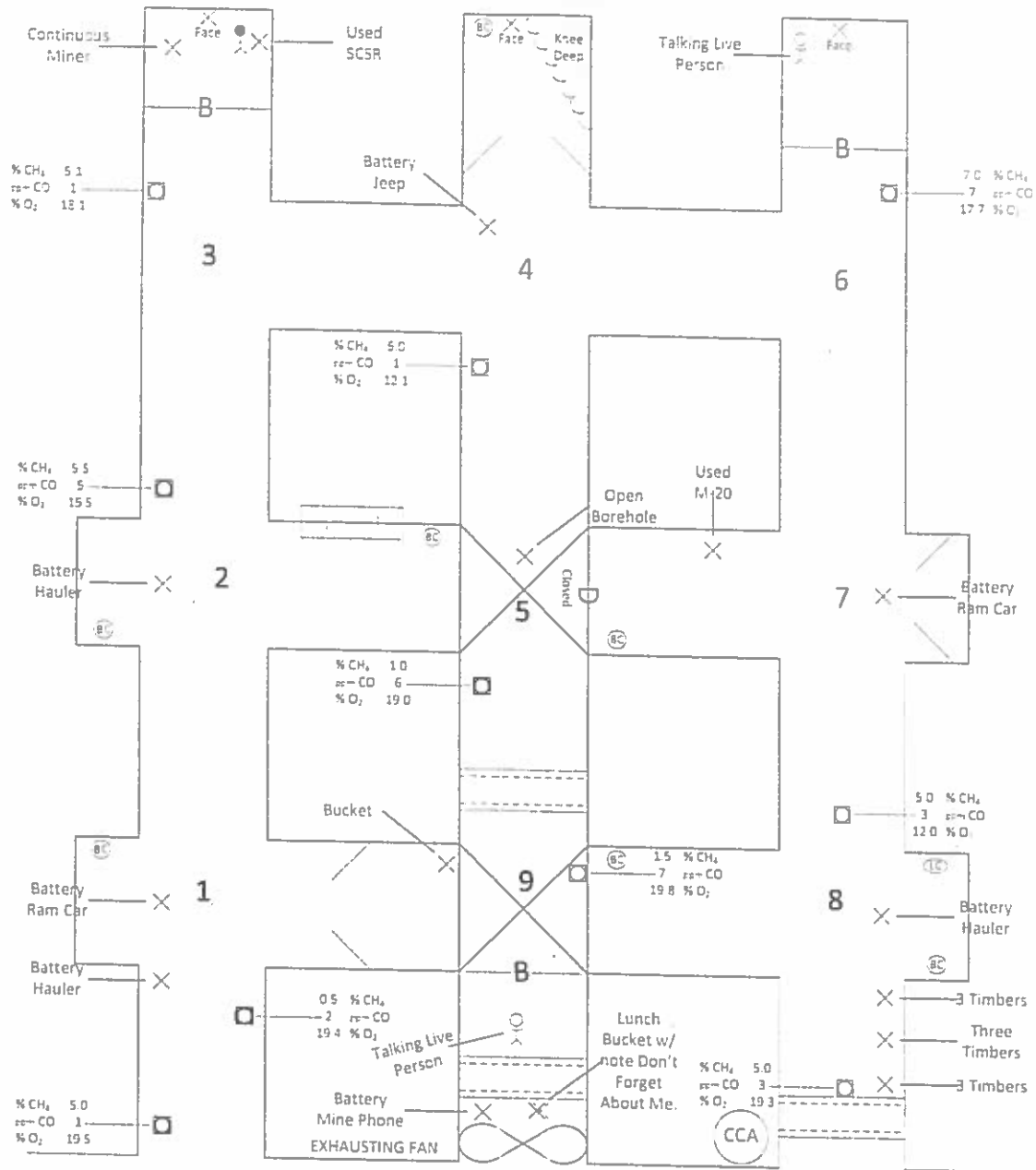
The team will travel over to the #2 entry, the team will find a battery jeep in the intersection. Inby the team will find a temporary stopping not intact, water knee deep on the right rib at a diagonal, a brattice cloth and the face, a R&R, the captain's D&I and a GT is required at this location. A GT is required in the area to the right toward the #3 entry. Outby the team will find an explosive and irrespirable gas extending into the outby intersection, a GT is required in this area.

#### **TEAM STOP #5**

The team should travel outby in the #2 entry. In the intersection the team will find an open bore hole, a GT is required at this location. On the right (facing outby) the team will find the wall of an overcast, the captain's D&I and a GT are required at this location. On the left (facing outby) the team will find the wall of an overcast with a door that is closed, the captain's D&I and a GT are required at this location. Outby the team will find an irrespirable gas extending to an area of unsafe roof across the entry, A R&R, the captain's D&I and a GT is required at this location. (When the captain gets to the unsafe roof the patient inby the fan will respond, "Help, Help, get me out of here the top is getting bad.")

#### **TEAM STOP #6**

At this stop inby the team will find an explosive & irrespirable gas extending to a barricade (The patient will respond "Help me get out of here".) The captain's D&I and a GT are required at this location. A GT is required in the area outby.



# TEAM

TEAM STOP

### **TEAM STOP #7**

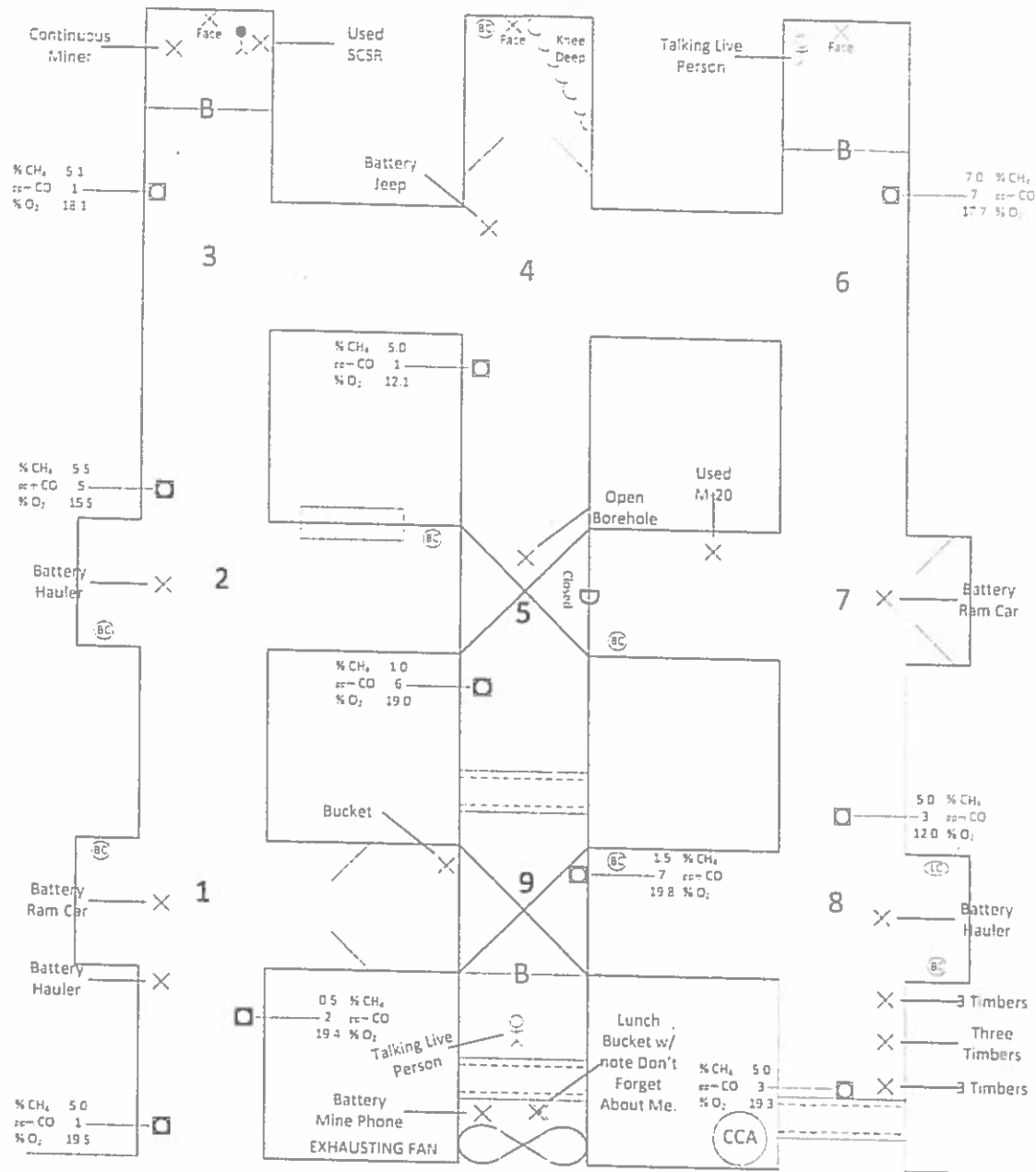
The team will find a battery ram car in the intersection, (facing outby) on the left a notch with a temporary stopping partially destroyed, a R&R, the captain's D&I and a GT are required at this location. On the right a used M-20 on the inby rib, on the outby rib a BC then the wall of an overcast, the captain's D&I are required at this location and a GT is required in this area. Outby the team will find a non-explosive & irrespirable gas extending into the intersection. A GT is required in this area.

### **TEAM STOP #8**

The team will find a battery hauler in the intersection, (facing outby) on the left the team will find a notch, A R&R and the captain's D&D are required at this location, a GT is required in this area. To the right the team will find the wall of an overcast, the captain's D&I and a GT are required at this location. Outby on the left rib the team will find nine total timbers. An explosive and irrespirable gas extending into an unsafe roof extending across the entry, A R&R and the captain's D&I are required at this location an a gas test is required in this area.

### **TEAM STOP #9**

The team must timber the unsafe roof in the #2 entry in front of the barricade. The team will find a non-explosive & respirable gas extending to the barricade. (Facing outby) on the left the wall of an overcast, the captain's D&I and a GT are required at this location. On the right the wall of an overcast, the captain's D&I and a GT are required at this location. A barricade the captain's D&I and a GT are required at this location.



# TEAM

TEAM STOP

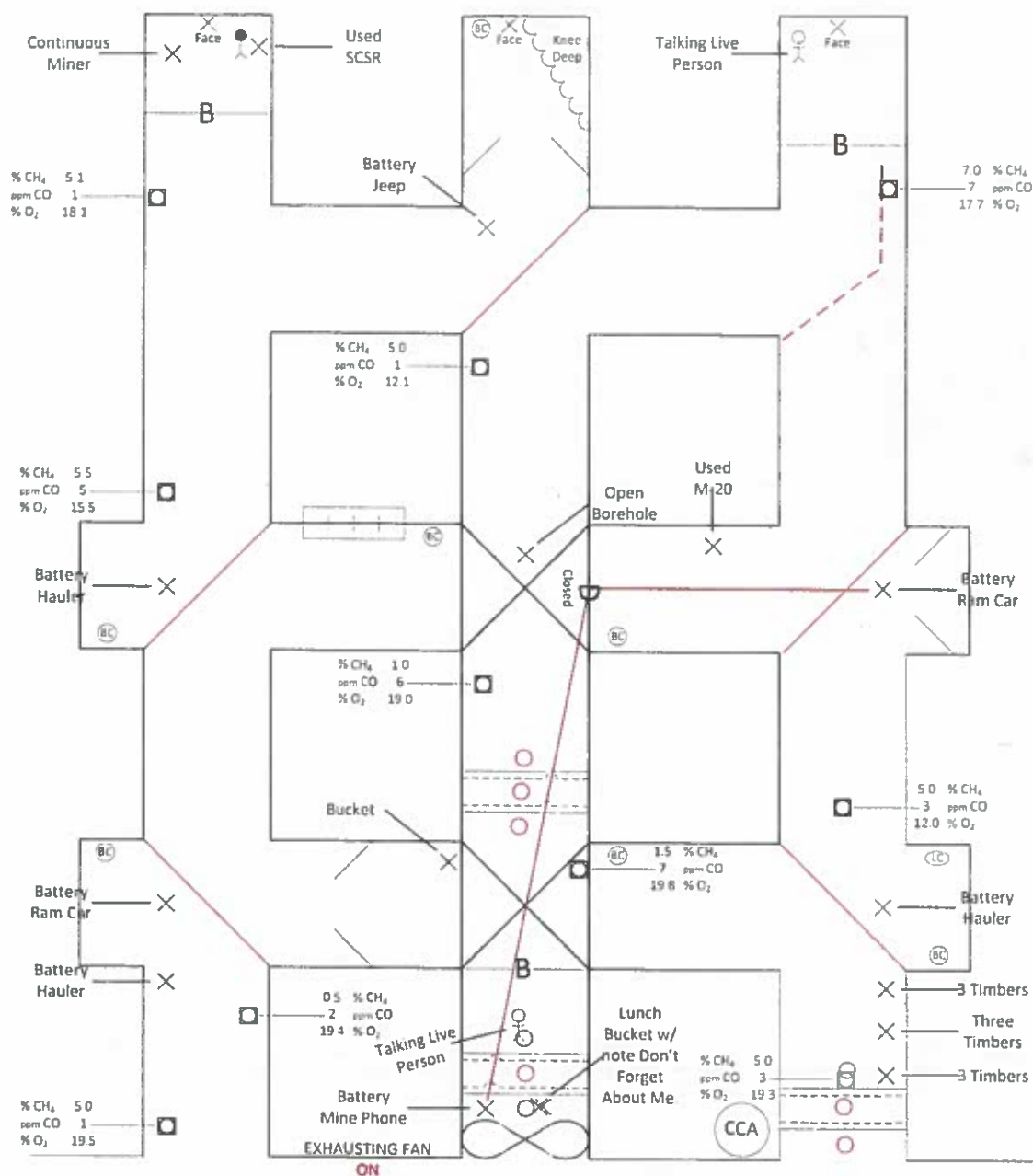
## **FIRST VENTILATION**

For the first vent the team should bring the air in the #3 entry, timber the unsafe roof, build an diagonal at x-cut A, take the air over the overcast to the #1 entry, build a diagonal in the #1 entry at x-cut A, take the air up the #1 entry to x-cut B, build a diagonal in the #1 entry at x-cut B, take the air over the overcast back to the #3 entry, (the door in the overcast must be closed) build an diagonal in the #3 entry at x-cut B, take the air up the #3 entry to the LOCC over to the #2 entry, build a diagonal in the #2 entry at x-cut C , take the air down the #2 entry, (the first unsafe roof should already be timbered) timber the unsafe roof inby the fan, move the battery mine phone to the #3 entry through the door in the overcast, turn the fan on, Wing the barricade.

(The Fan Cannot Be Stopped, Stalled or Reversed)

(To Remove The Patient They Must Have Some Type Of Respiratory Protection On Because Of The Irrespirable Atmosphere In The #1 & #3 Entry.)

(The Patient May Be Brought Out The #1 Or #3 Entry)



# TEAM

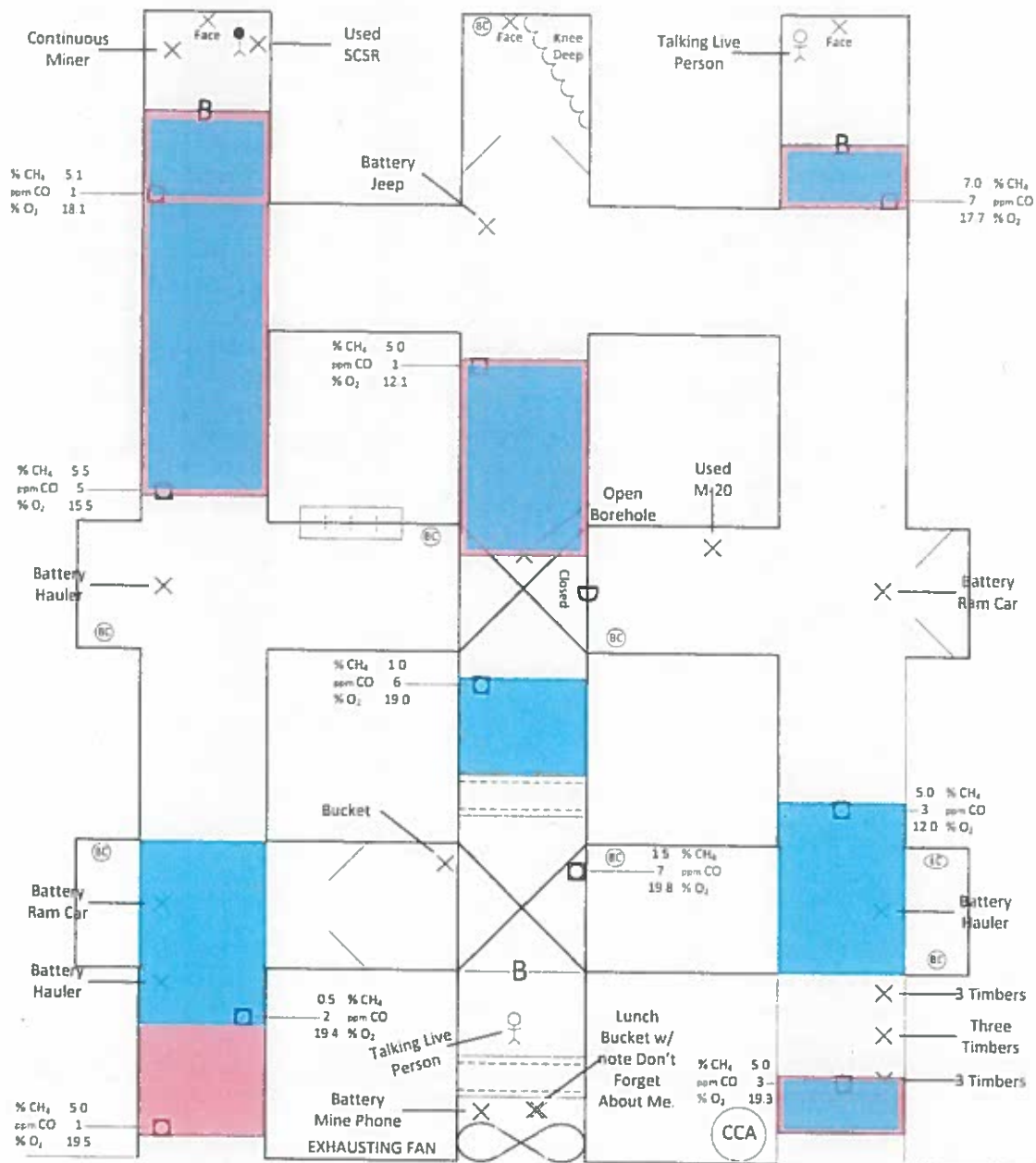
FIRST VENT



## **SECOND VENTILATION**

For the second vent the team should bring the air in the #3 entry, (timber the unsafe roof which should already be done) build in x-cut A between #2 & #3 entry, build in x-cut B between the #2 & #3 entry to take the air to the LOCC, build in the #2 entry between x-cuts B & C, down the #1 entry to x-cut B, build a diagonal to take the air over the overcast, open the door in the overcast, take the air down the #2 entry, (both unsafe roof areas should already be timbered) out the fan, Wing the barricade.





# TEAM

EXTENT OF GAS