

2016 WKMI MINE RESCUE CONTEST

Today I Will Do What Others Won't



So Tomorrow I Can Accomplish What Others Can't



MAY 25 2016

NATIONAL MINE RESCUE

WKMI CONTEST

May 25, 2016

Thanks for answering our call for help! You are located on the surface of our highwall mine, The WKMI #1 Mine. This is what we have found up to this time.

When we arrived this morning we noticed that the exhausting mine fan was not running and had been off about an hour or so. So I tried to contact the foreman, one of the two pin men or the scoop man and mechanic that had went in earlier to complete some work around the bottom of our new air shaft in the face of number one. When I could not get anyone to answer me, I started to enter the mine but I encountered some low oxygen and high methane at a caved area in the number two entry and low oxygen in mouth of the number three entry. At that time I called for help.

The electrician has repaired the fan and it is ready whenever you need it. To turn the fan on you must contact the command center. All the power in the mine has been locked and tagged out and is being guarded. The mine is walking height. All of the regulatory agencies have been notified and have their personnel here. There are additional mine rescue teams here to serve as your back up. GOOD LUCK!

MINE RESCUE

WRITTEN INSTRUCTIONS

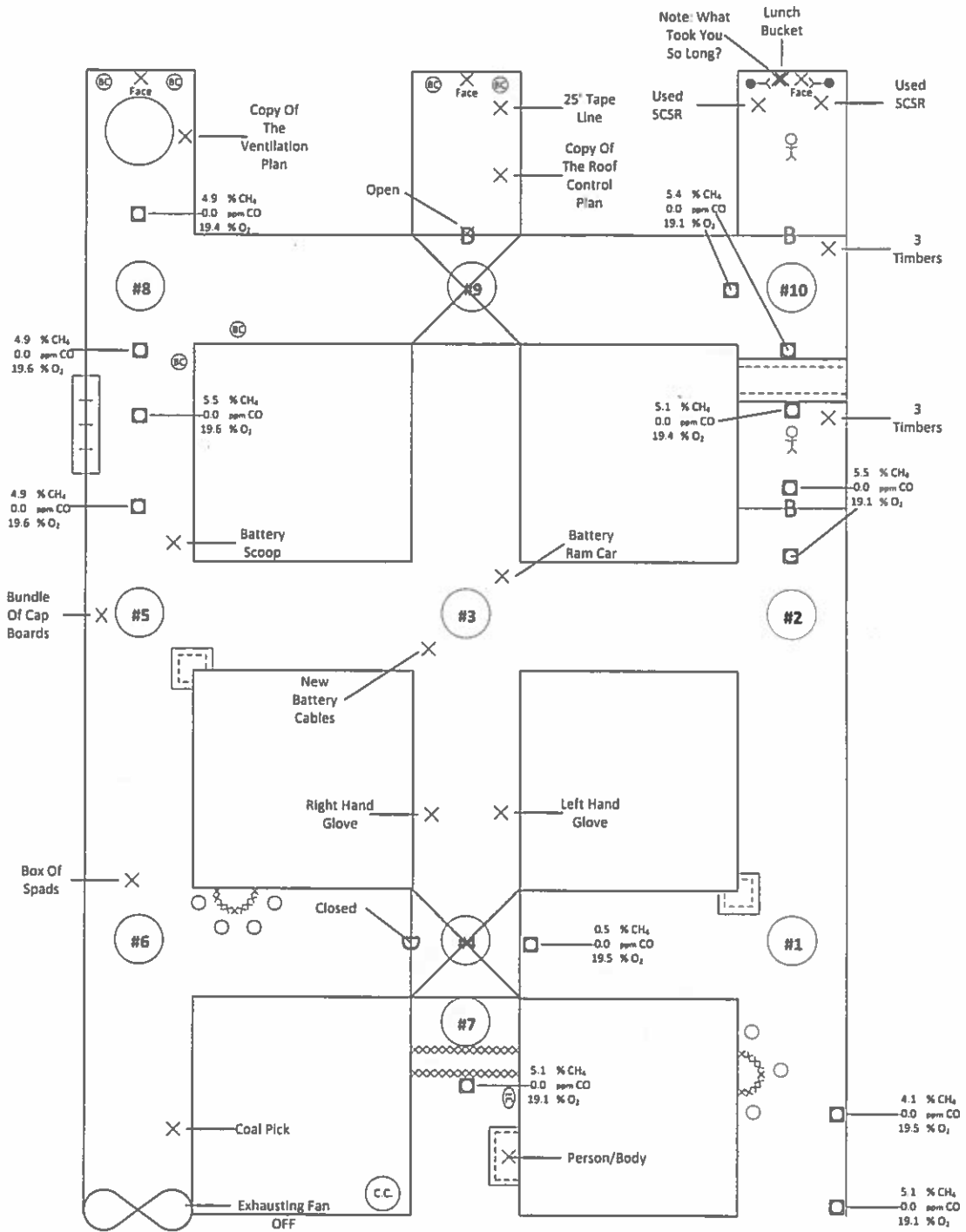
- **ACCOUNT FOR ALL MISSING PERSONS**
- **BRING SURVIVORS TO THE SURFACE**
- **FAN CAN BE STARTED BY REQUESTING IT TO BE TURNED ON BY THE COMMAND CENTER**
- **ONCE THE FAN IS STARTED IT CANNOT BE STOPPED, STALLED OR REVERSED**
- **EXPLORE THE ENTIRE MINE IF IT CAN BE DONE SO SAFELY**
- **THE TEAM MUST NOTIFY THE COMMAND CENTER OF ANY CO LEVELS ABOVE 51PPM BEFORE ADVANCING TO THE NEXT TEAM STOP**

WORKING PROCEDURES:

When the team enters the Fresh Air Base, the Superintendent will introduce himself & his 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 a underground highwall mine. The captain should make the three entrances prior to the team going underground. In the #1 entry he will find an exhausting fan that is off and the captain should make a GT at the fan and D&I its location. In the #2 entry, the captain will find an elongated unsafe roof on the right rib line with a body in it, and then he should find an explosive and irrespirable atmosphere, extending into a caved area. A GT is required in this area and a R&R and D&I is required at the caved area. In the #3 entry he will find an irrespirable & explosive atmosphere that extends to another gas box that is respirable and non-explosive that extends through a caved area on the left rib. A GT is required in this area.



TEAM STOPS MAP

2016 WKMI CONTEST

TEAM # _____

TEAM STOP #1

The team must enter the mine in the #3 entry. At team stop #1, an apparatus check must be made with all team members underground. The captain will find an unsafe corner on the inby left hand side. To the left toward the #2 entry the captain will find the wall of an overcast at which he must D&I, and a GT is required at the wall of the overcast. A GT is required in the area of the #3 entry toward the face.

TEAM STOP #2

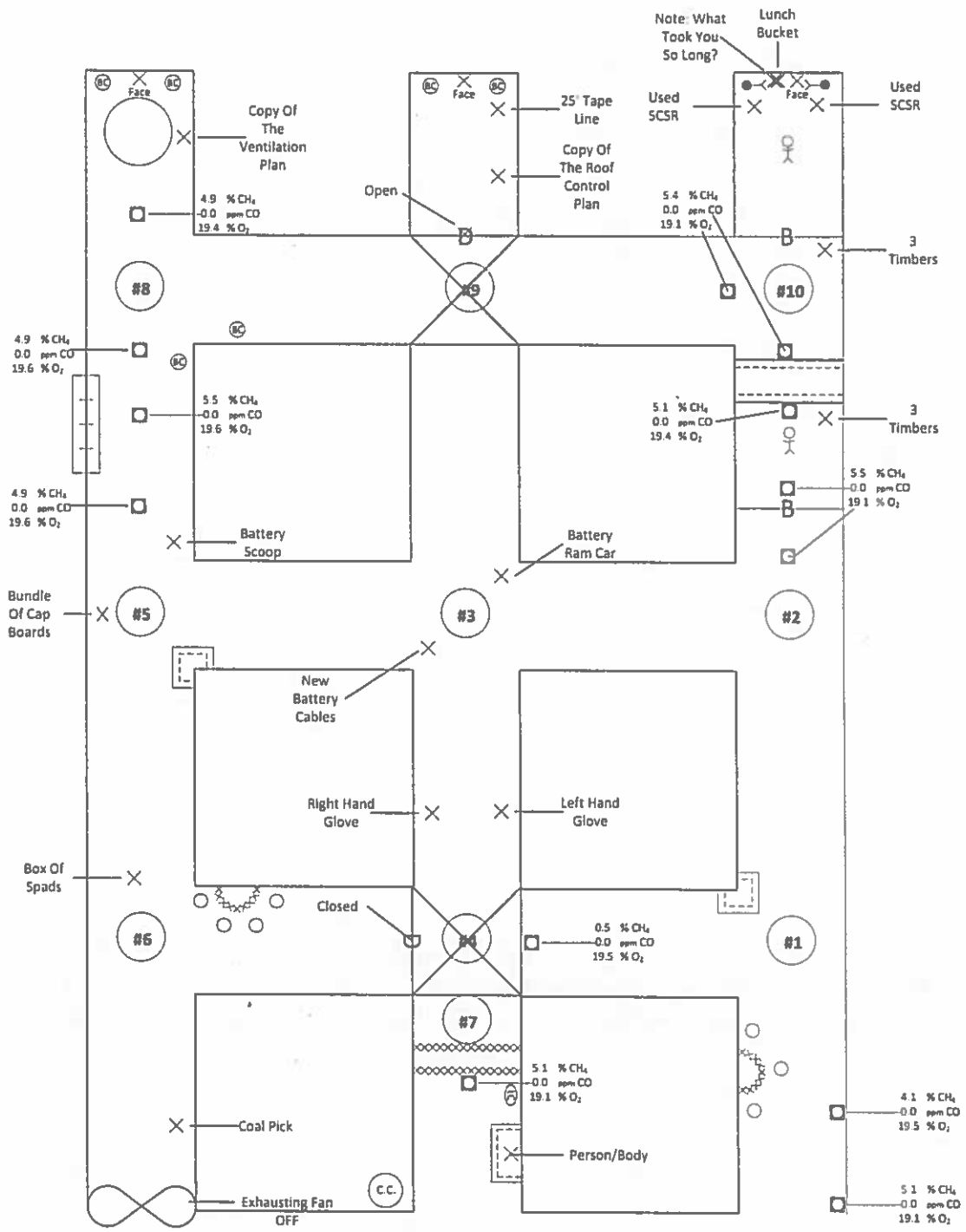
The team should travel up the #3 entry into the next intersection. The team will find a gas box with explosive & irrespirable gases in front of a barricade in the #3 entry. The live conscious patient behind the barricade will respond, "Help get me outta here, the top is working behind me and it's starting to concern me." The captain's D&I, and a GT are required at the barricade. A GT is required in the area to the left.

TEAM STOP #3

The team will travel to the #2 entry where they will find a battery ram car in the intersection. Outby they will find an open entry extending to an overcast a GT is required in this area. Inby they will find an open entry extending to the wall of an overcast, The captain's D&I and a GT are required at the wall of the overcast. Toward the #1 entry the team will find an unsafe corner on the outby side. A GT is required in the area toward the #1 entry.

TEAM STOP #4

The team will travel outby into the intersection with an overcast that has a door that is closed on the left hand side toward the #1 entry. The team will find a temporary stopping on the outby edge of the overcast. The captain's D&I's and a GT are required at both overcast walls and at the temporary stopping.



TEAM STOPS MAP

2016 WKMI CONTEST

TEAM # _____

TEAM STOP #5

The team will travel back around to the #1 entry. Inby they will find a battery scoop, and then they will find a non-explosive & respirable gas extending to a gas box that is explosive & respirable, which extends to a gas box that is non-explosive & respirable. A GT is required in this area. The team will find a BC which will allow them to make the area in the #2 entry between the temporary stopping & the caved in the #2 entry. A GT is required in the area outby the intersection.

TEAM STOP #6

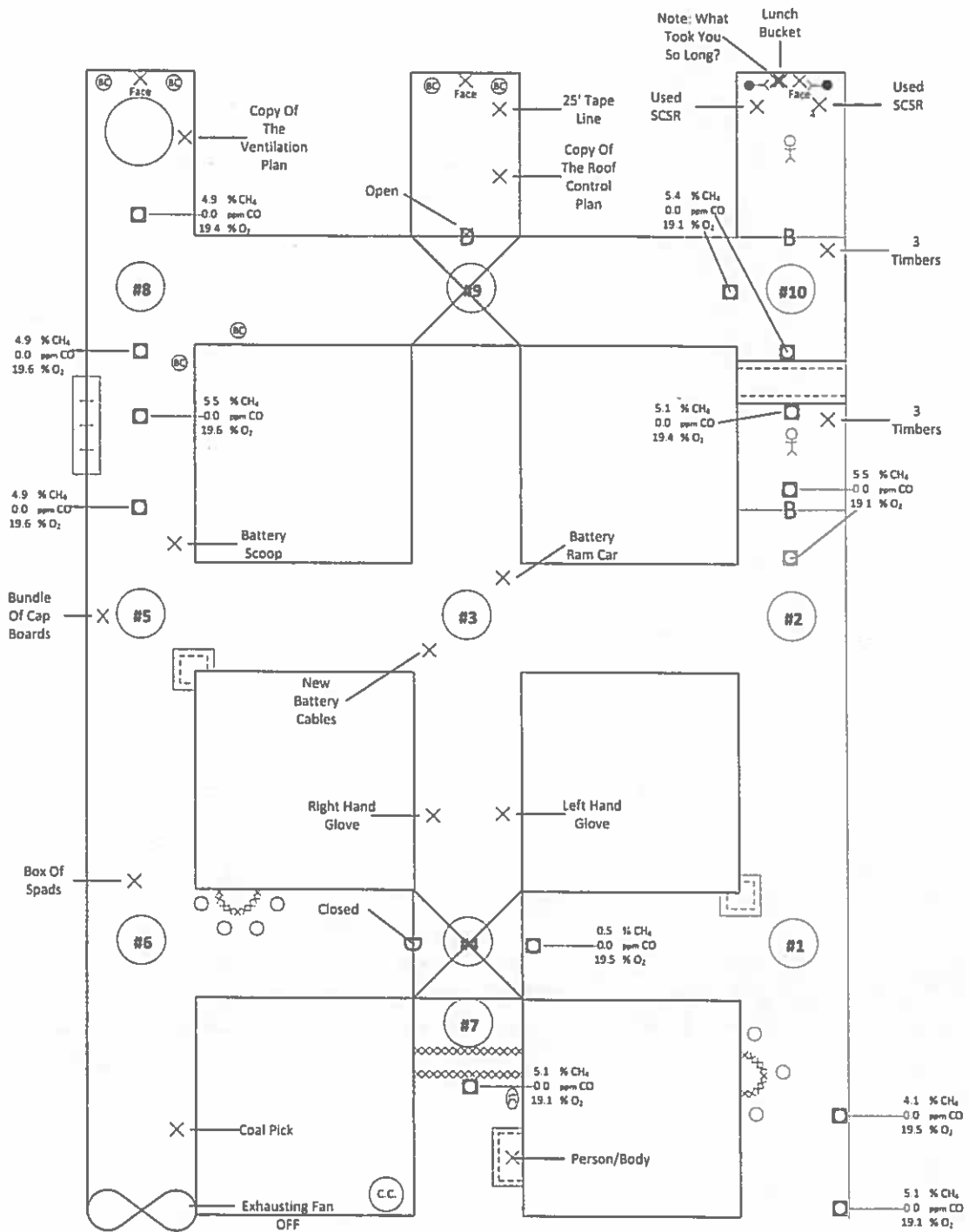
The team will travel outby in the #1 entry where they will find the back side of the fan the captain's D&I and GT are required at this location. To the right toward the #2 entry the team will find a caved area on the inby rib and the wall of an overcast with a door closed. The captain's D&I and a GT are required at the wall of overcast.

TEAM STOP #7

The team should make the area between the temporary stopping and the caved area in the #2 entry. This area should be made before the team goes inby the rib line into the LOCC in the #1 entry. At this location the team will find a caved area outby, a R&R, the captain's D&I and a GT are required at this location.

TEAM STOP #8

The team will travel into the LOCC where they will find a non-explosive & irrespirable gas and an air shaft in the face of the #1 entry. At the face the captain's D&I's, a R&R, and a GT are required. A GT is required in the area to the right toward the #2 entry.



TEAM STOPS MAP

2016 WKMI CONTEST

TEAM # _____

TEAM STOP #9

The team will travel to the intersection in the #2 entry. They will find a wall of overcast outby, the captain's D&I and a GT are required at this location, and a wall of overcast inby with a door open the captain's D&I and a GT are required at this location. Inby the team will find the face of #2, the captain's D&I, a R&R, and a GT are required at this location. Toward the #3 entry the team will find an explosive & irrespirable gas extending into the intersection of the #3 entry, a GT is required in this area. At this team stop the team MUST ventilate the barricade in the #3 entry where the response was.

(See the first vent map.)

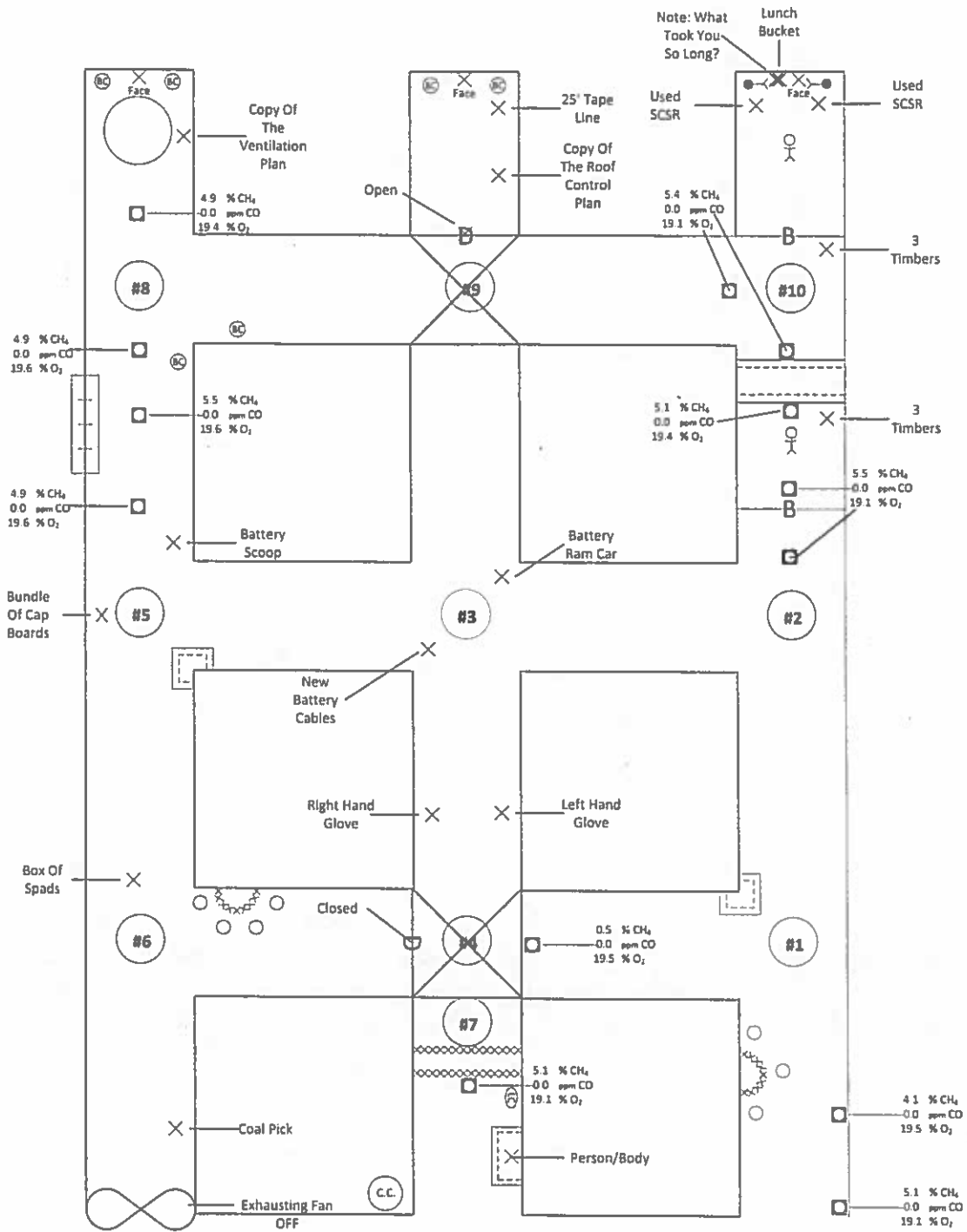
Behind the barricade the team will find an explosive & irrespirable gas, with a live conscious person which should put a respiratory device on, due to the patient being located in a irrespirable atmosphere and they must be moved through the irrespirable between FAB and the 1st x-cut, the captain should D&I the conscious live person. The team should find three timbers and an explosive & irrespirable gas extending into the unsafe roof, the captain's D&I and a R&R are required at this location. The team should use the three timbers to timber into the body in the #2 entry or they will delay.

TEAM STOP #10

The team will travel into the intersection of the #3 entry and find a barricade inby, the captain's D&I's and a GT are required at this location, outby the team will find an explosive & irrespirable gas extending into an unsafe roof, the captain's D&I's, a R&R and a GT is required at this location.

(See second vent map.)

Behind the barricade the team will find a unconscious live man which should have a respiratory device placed on them due to the irrespirable in the #3 entry between the FAB and the first x-cut. The captain's D&I are required at the unconscious live person, each body and the lunch bucket. The captain's D&I, R&R and a GT are also required at the face.



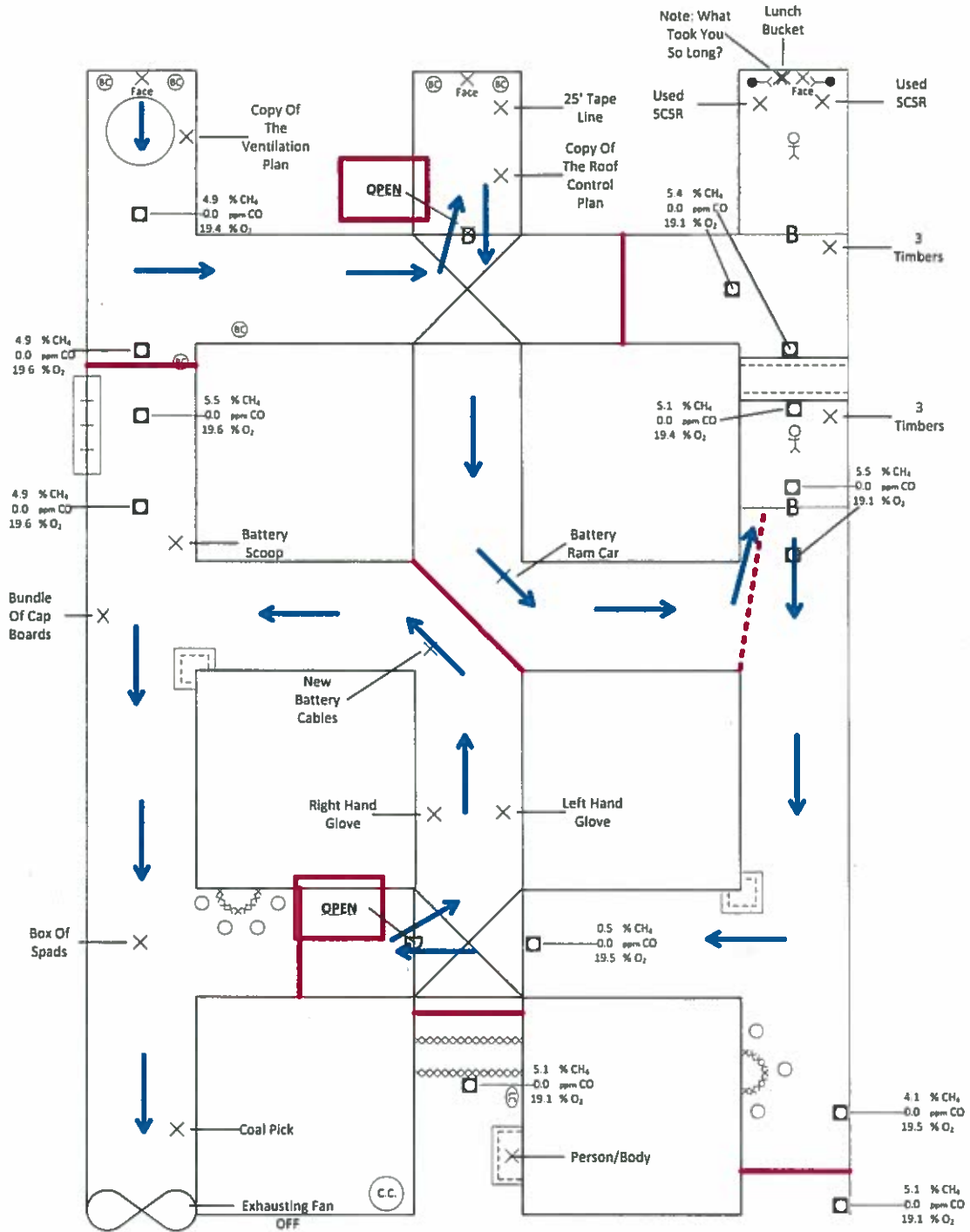
TEAM STOPS MAP

2016 WKMI CONTEST

TEAM # _____

FIRST VENTILATION

For the first vent the team should bring the air down the shaft, build outby in #1entry to turn the air over to the #2 entry, build between the #2 & #3 entry bring the air up through the overcast door back over the overcast, down the #2 entry to a diagonal over to the barricade, wing the barricade down the #3 entry, build in the #3 entry between the FAB and the first x-cut, turn the air toward the #2 entry over the overcast, build between the #1 & #2 entry and open the door to turn the air back under the overcast, must build in the #2 entry between the FAB and the first x-cut to turn the air up the #2 entry to the diagonal, over to the #1 entry and out the fan.



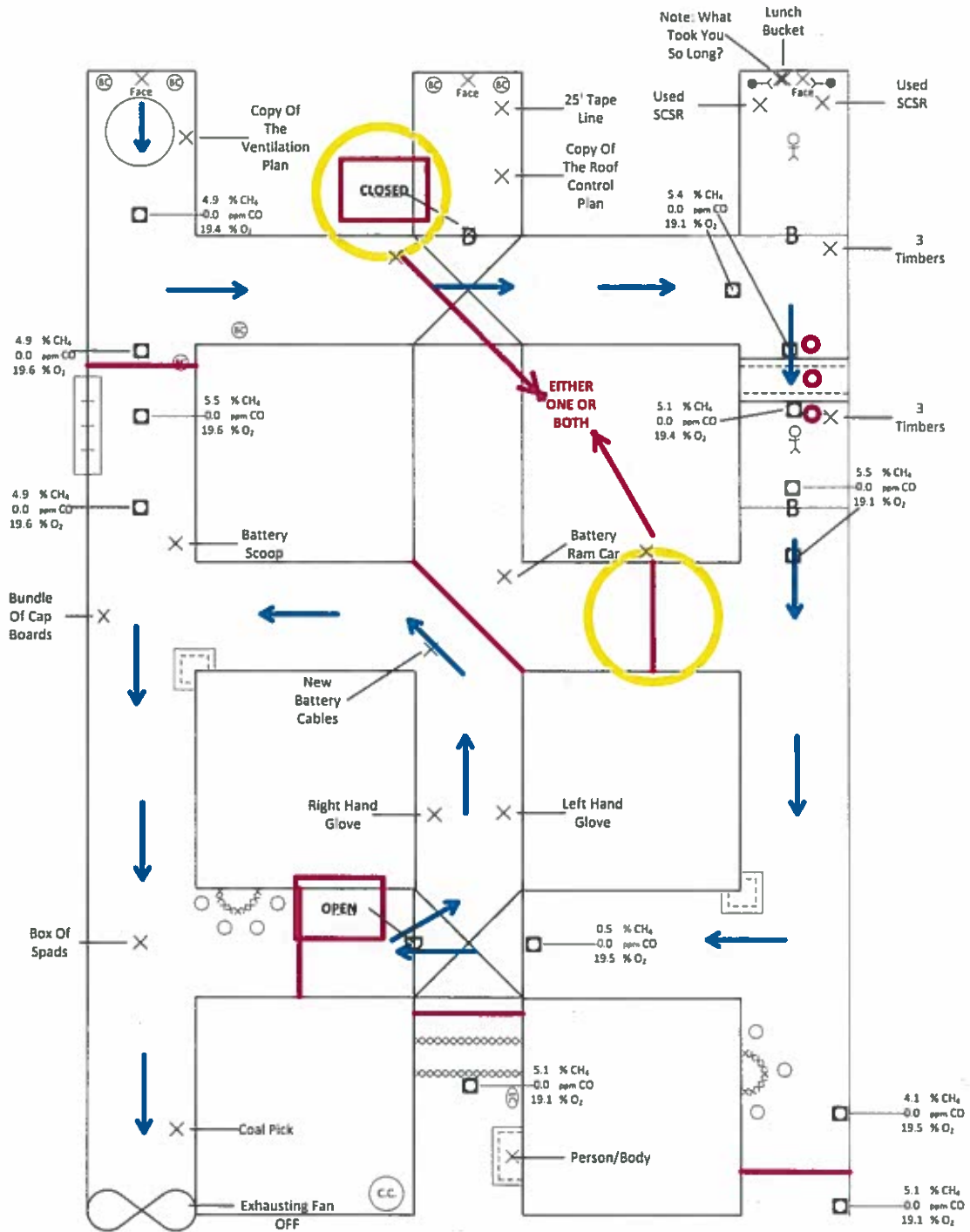
1st VENT MAP

2016 WKMI CONTEST

TEAM # _____

SECOND VENTILATION

For the second vent the team should bring the air down the shaft, build outby in the #1 entry to turn the air over to the #2 entry, close the overcast door to push the air over to the #3 entry, timber the unsafe in the #3 entry, build between the #2 & #3 entry in the #2 x-cut, build in the #3 entry between the FAB and the first x-cut, turn the air toward the #2 entry over the overcast, build between the #1 & #2 entry and open the door to turn the air back under the overcast, must build in the #2 entry between the FAB and the first x-cut to turn the air up the #2 entry to the diagonal, over to the #1 entry and out the fan.



2nd VENT MAP

2016 WKMI CONTEST

TEAM # _____

KEYS TO THE PROBLEM

When the team finds the BC in the #1 entry they should return to the #2 entry and tie in the area between the temporary stopping and the caved area in the #2 entry. They must do this before the #5 man is taken in by the rib line of the #2 x-cut. They must airlock to enter this area.

When the team makes the area of the overcast in the LOCC of the #2 entry the barricade with the response can be ventilated.

Once the team starts the fan they must remain air locked. The team should airlock in and out of the mine every time.

No air should ever move in the #1 entry between the second cross-cut and the LOCC or the #2 & #3 entries between the FAB and the first cross-cut.

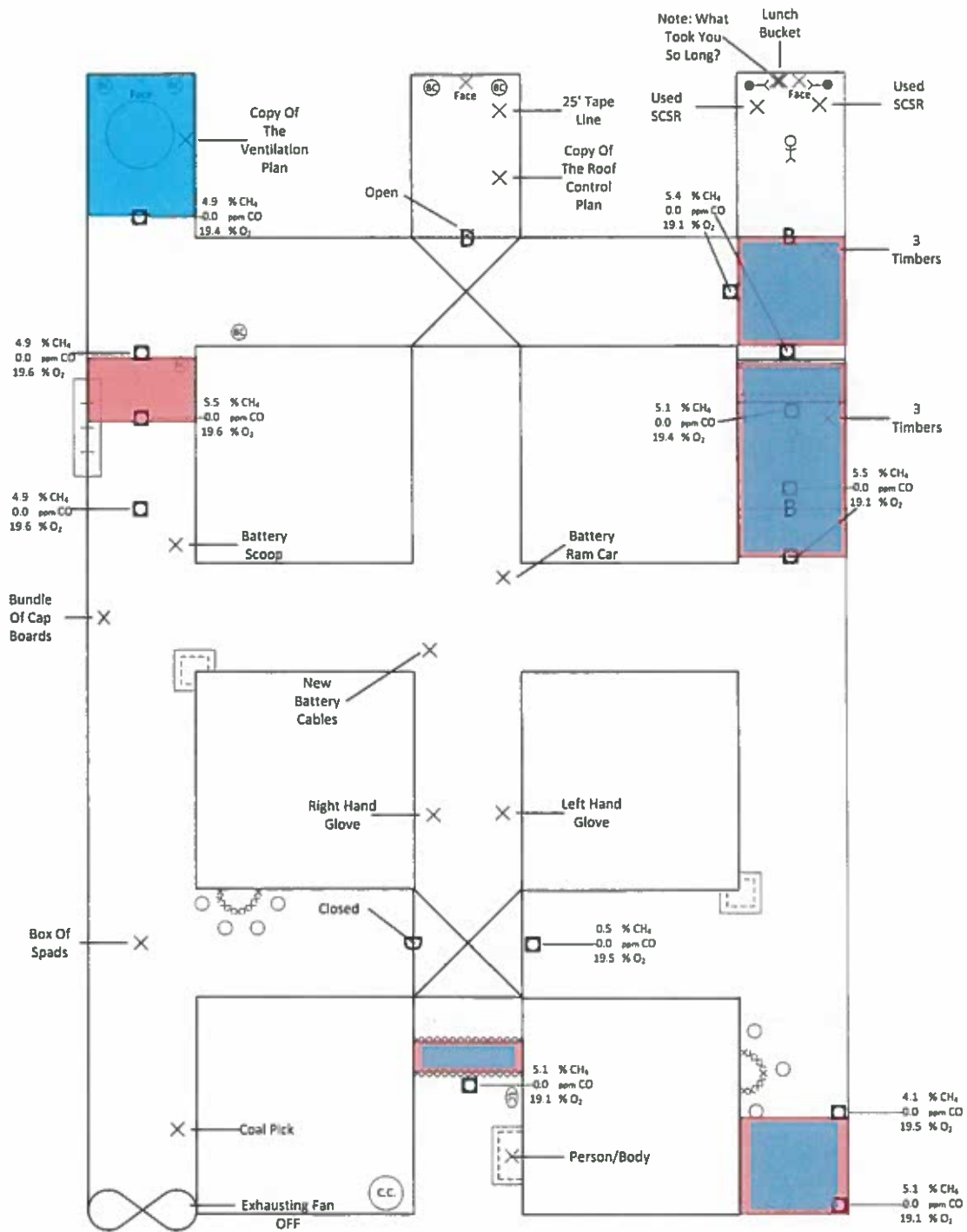
Both patients must have a respiratory device on when they are brought out of the mine due to the irrespirable between the FAB and the first x-cut.

When the team enters the barricade with the response they will find three timbers they should bring those back to the #2 entry and timber into the body in the unsafe roof. (When the team brings the patient to the FAB.)

When the team leaves the barricade they must rebuild the barricade or the air will move over the unsafe roof, if the team did not build between the #2 & #3 entry in the LOCC.

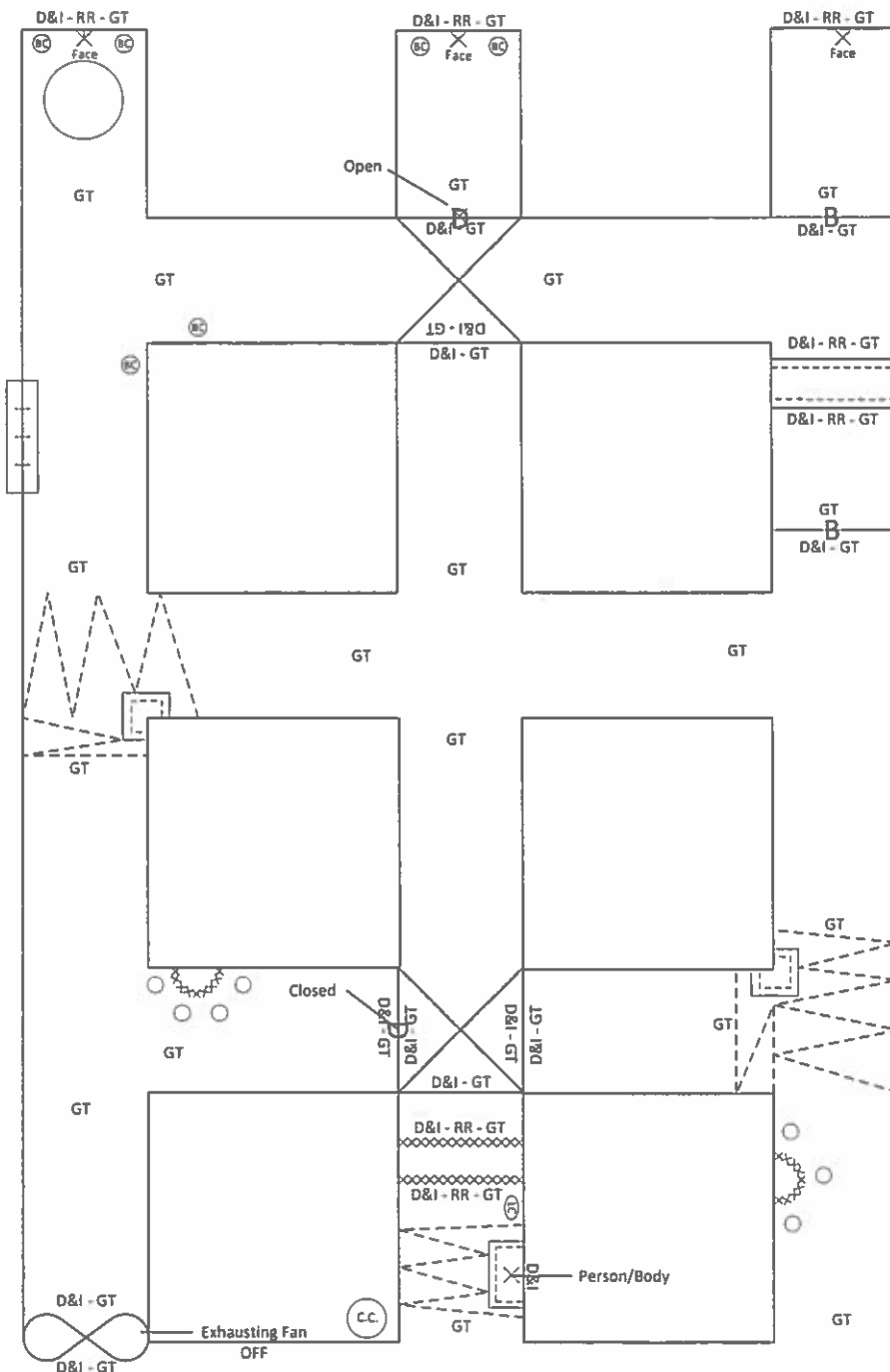
On the second vent the team must close the door in the overcast in the #2 entry in order to have all of the air from one source to ventilate the barricade.

They must open the door in the overcast in the #2 entry in the LOCC and take down the optional build between the #2 & #3 entries in the second x-cut, before they airlock to enter the barricade or they will stall the fan. The diagonal must stay intact or the team will move the explosive mixtures over the Battery Ram Car.



EXTENT OF GAS MAP 2016 WKMI CONTEST

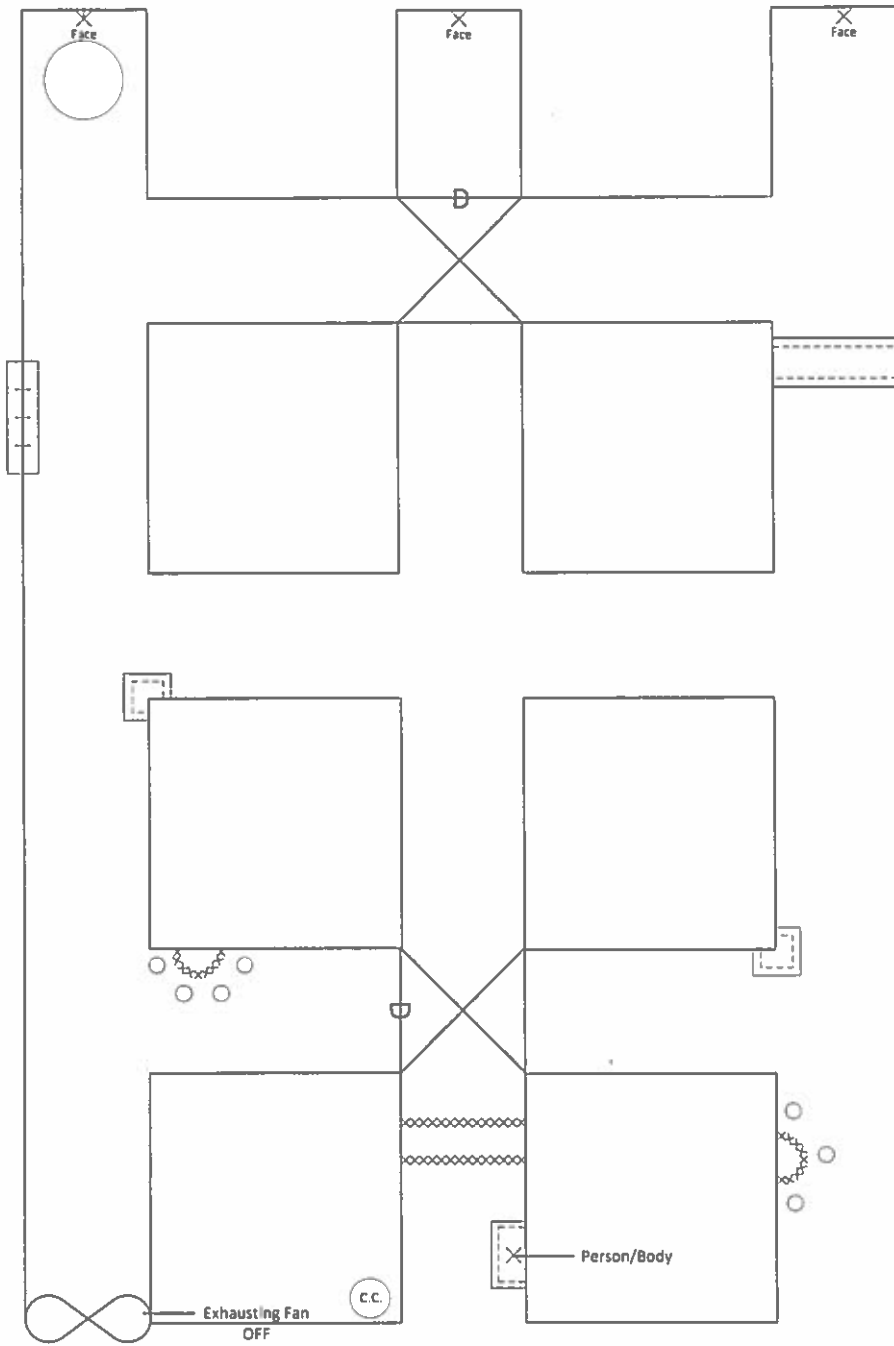
TEAM # _____



JUDGES MAP

2016 WKMI CONTEST

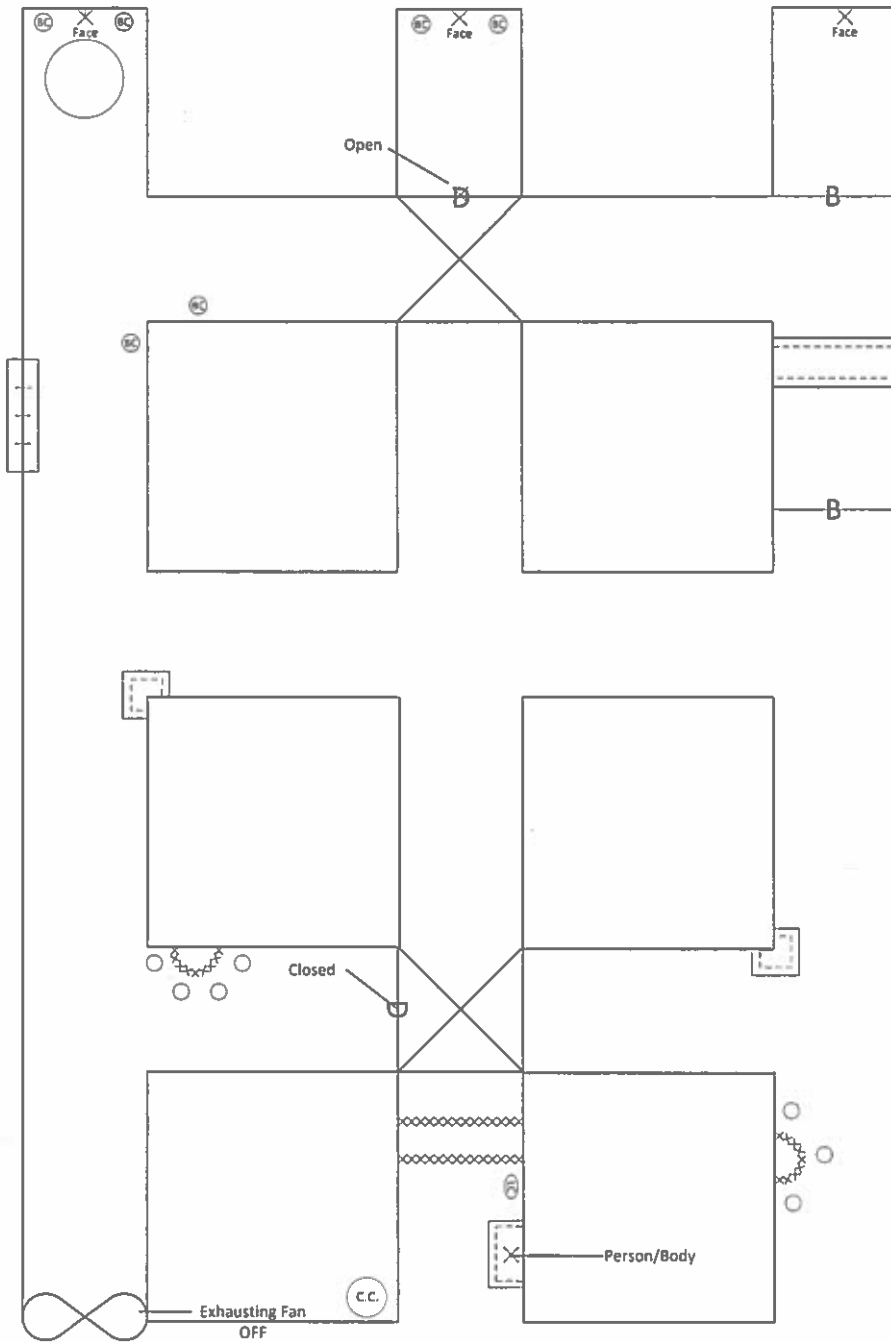
TEAM # _____



FINAL VENT MAP

2016 WKMI CONTEST

TEAM # _____



JUDGES MAP

2016 WKMI CONTEST

TEAM # _____

NOTES: _____
