

2022 Post 5

Day 2 Statement

Early this morning at the Mountaineer #2 mine, a six-man crew was sent to the three-entry section to pump water and prepare the unit for day shift production. About an hour ago, one of the crew members called out to dispatch and said he heard what sounded like an explosion coming from inby his location on the section. We then lost phone communication with the crew member and have had no further contact with the miners.

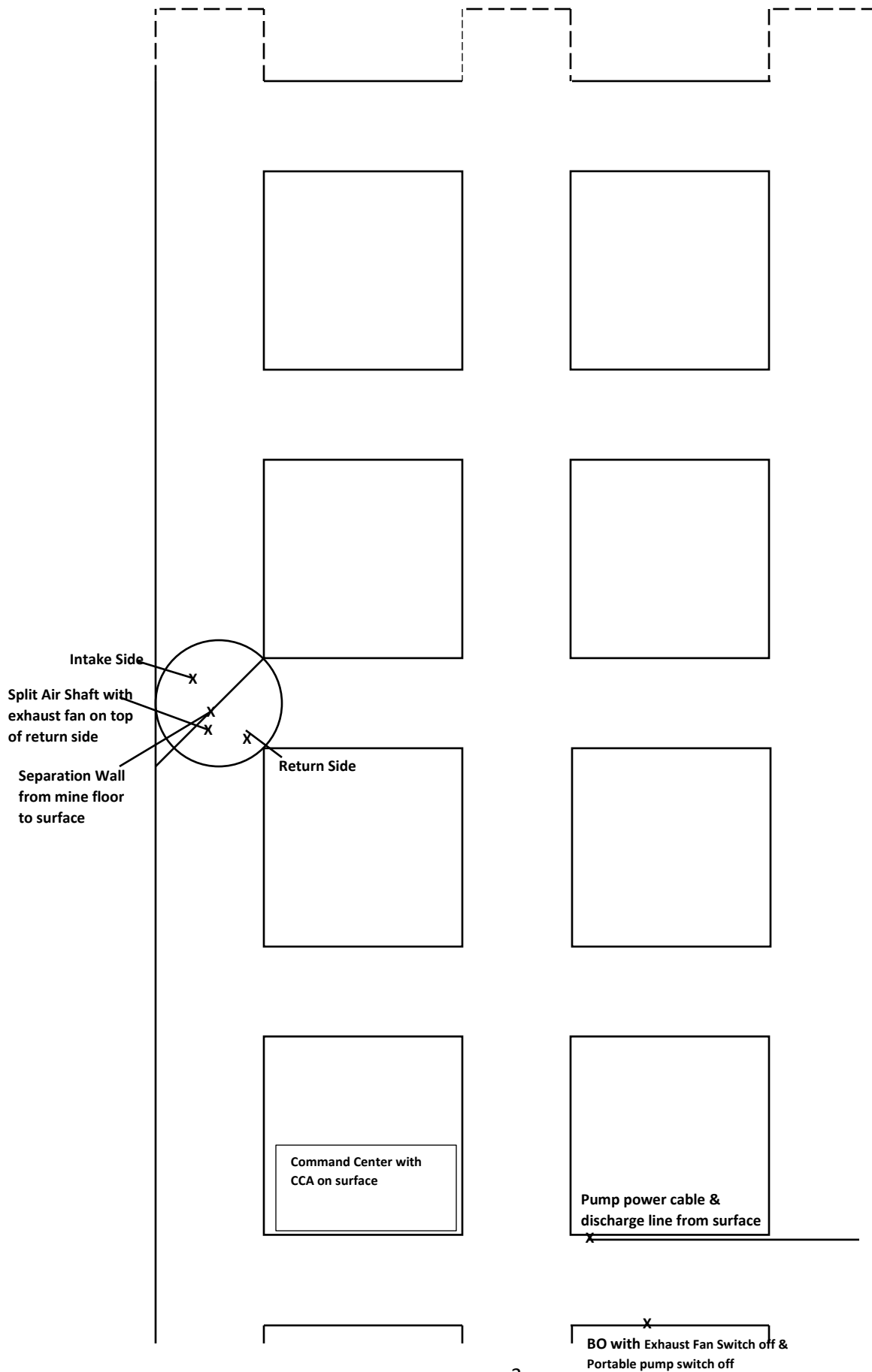
You will be located underground at the fresh air base established by another rescue team. It is safe to use areas outby the fresh air base for ventilation purposes. The entries are numbered from left to right with #1 entry on the left.

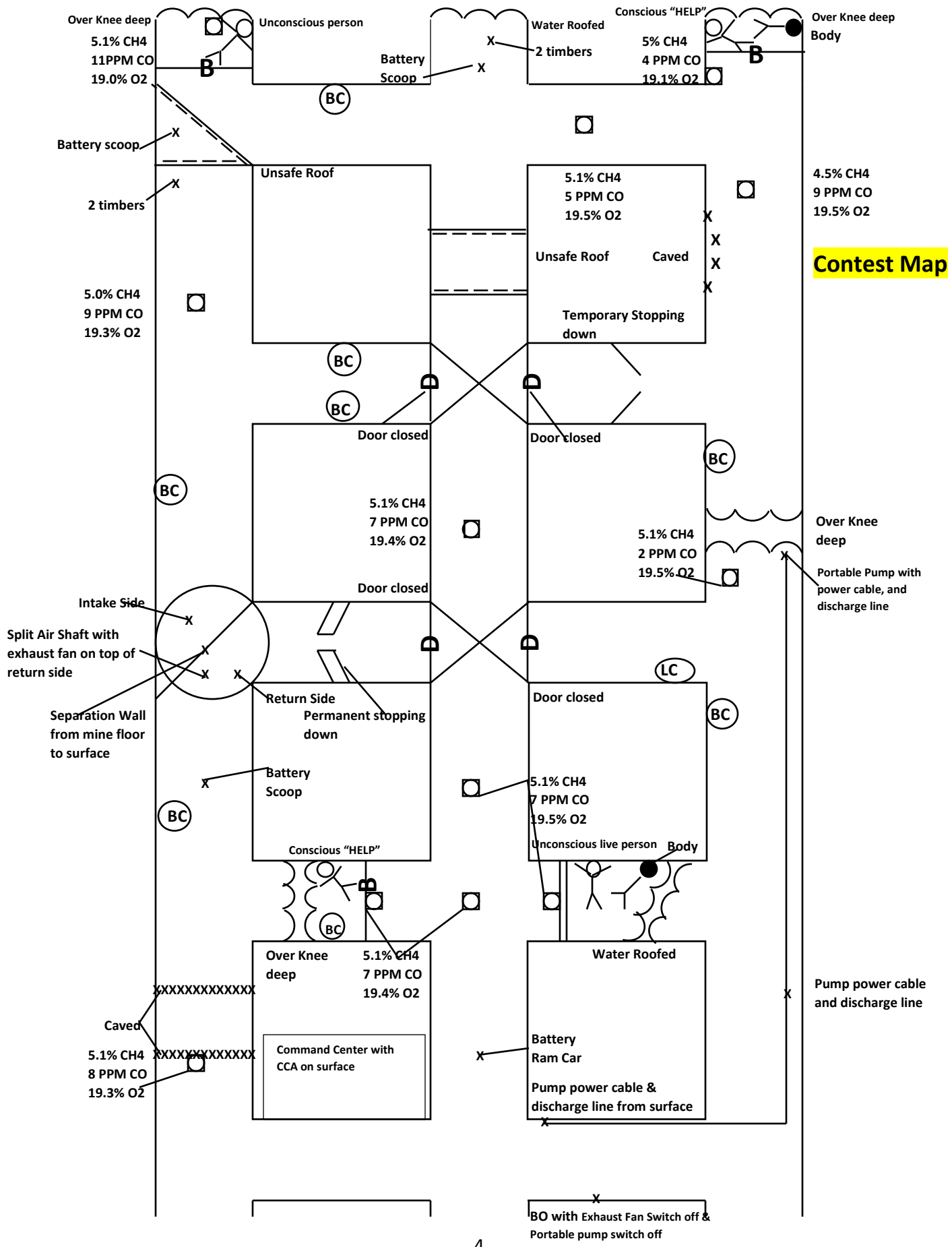
Outby areas of the mine and the section are ventilated by an exhaust fan on the return side of a split ventilation shaft that is located in the no. 1 entry on the section. All entries outby the fresh air base are intake entries. The fan is off but can be started by using an on/off switch located in the fresh airbase by the briefing officer if needed. A portable pump is being used on the section to help control the ongoing problem of water coming from the mine floor constantly. The pump is off but can be started by using an on/off switch located in the fresh airbase by the briefing officer if needed.

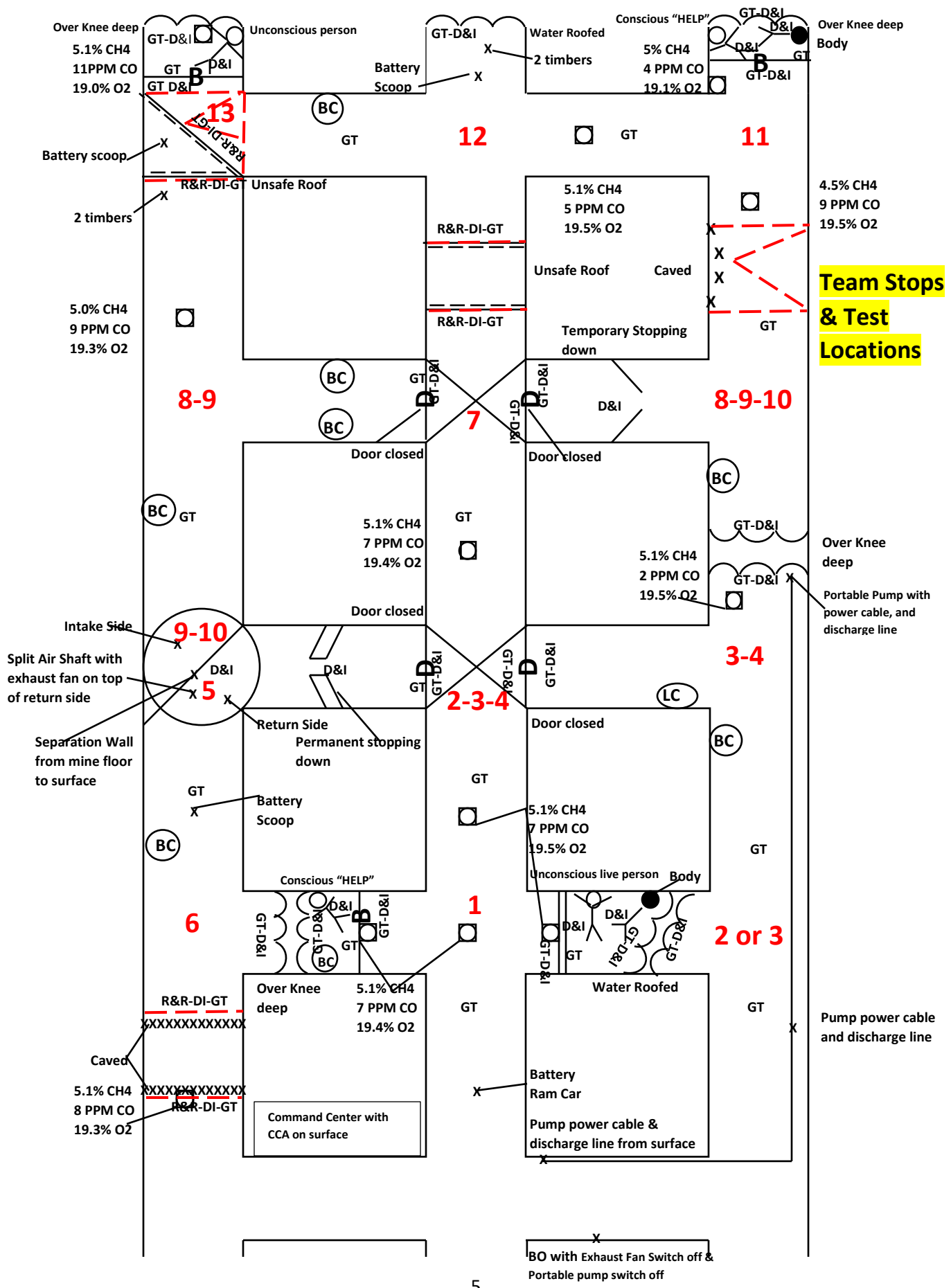
All authorities have been notified and a backup team is here. The mine maps are not up to date. So, please be careful during your exploration and thank you for your help....

Team Instructions

- **The exhaust fan cannot be reversed or stalled for any reason**
- **The exhaust fan can be turned on & off by the briefing officer**
- **The portable pump can be turned on and off by the Briefing Officer and water may return to its original depth when pump is off**
- **The Command Center Attendant is on the surface and the briefing officer is underground at the fresh air base**







Over Knee deep
 5.1% CH4
 11PPM CO
 19.0% O2

Unconscious person
 Battery Scoop

Water Roofed
 2 timbers
 Conscious "HELP"
 5% CH4
 4 PPM CO
 19.1% O2

Over Knee deep
 Body

Battery scoop

5.0% CH4
 9 PPM CO
 19.3% O2

4.5% CH4
 9 PPM CO
 19.5% O2

Team Stops & Test Locations

Over Knee deep
 Portable Pump with power cable, and discharge line

Pump power cable and discharge line

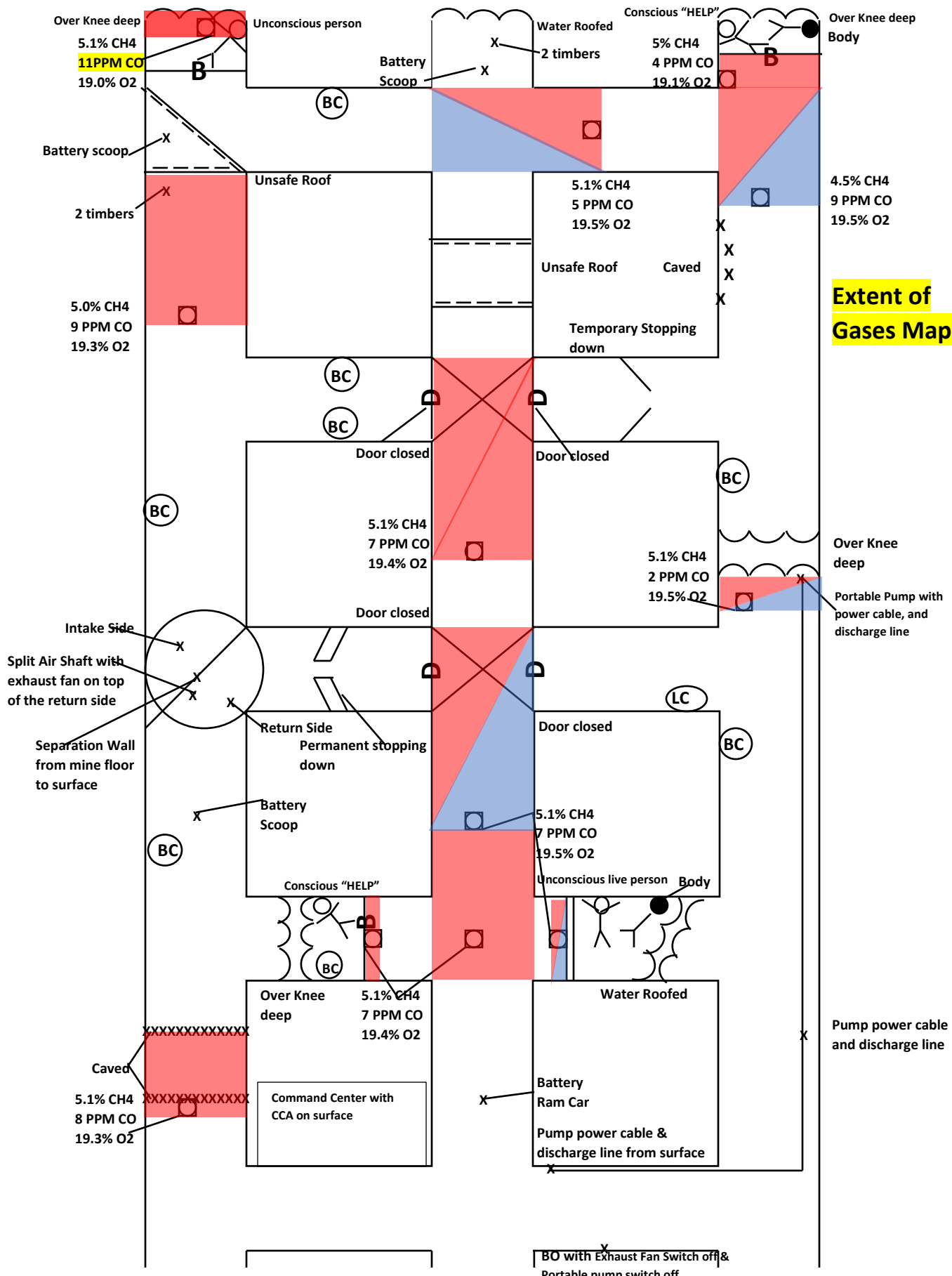
Intake Side
 Split Air Shaft with exhaust fan on top of return side
 Separation Wall from mine floor to surface

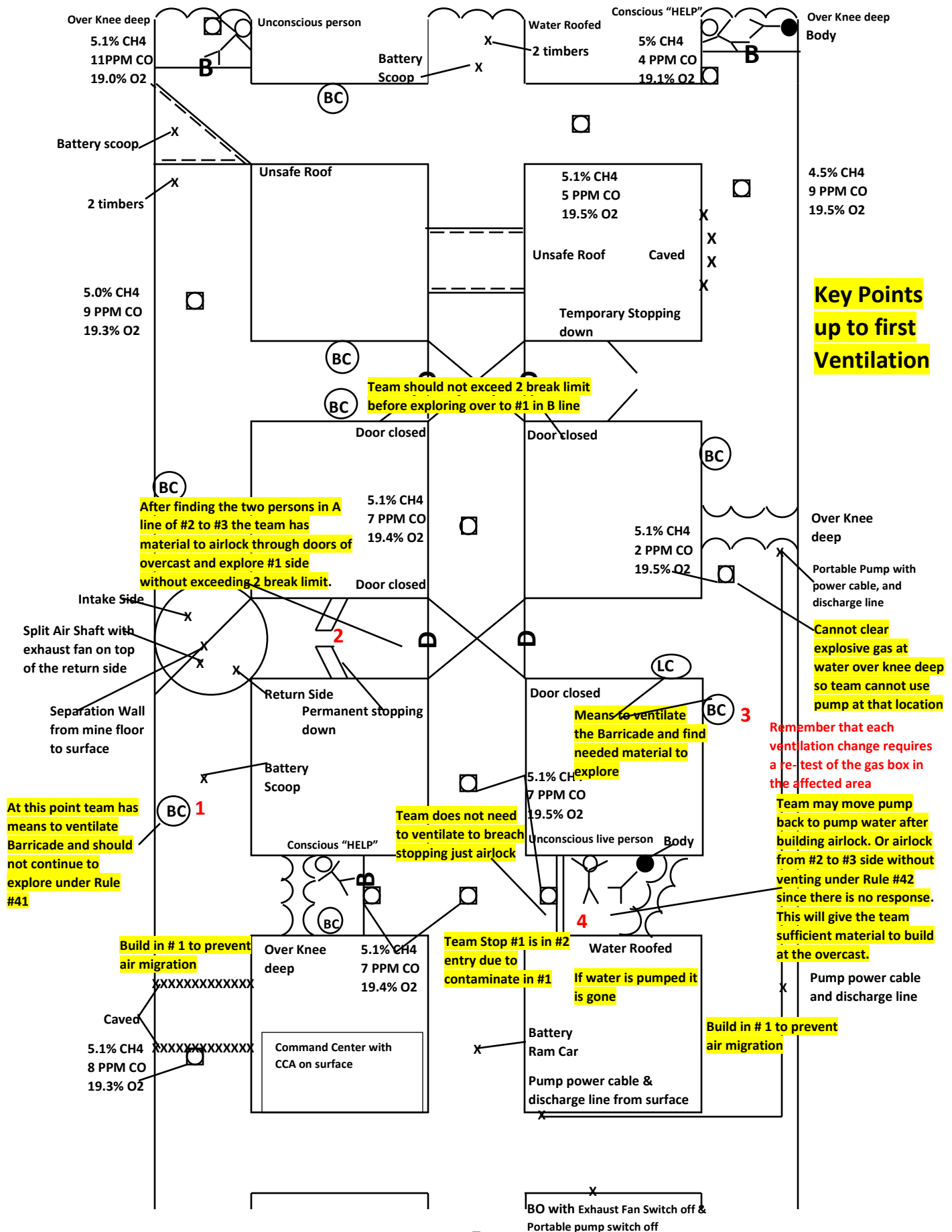
Over Knee deep
 5.1% CH4
 7 PPM CO
 19.4% O2

5.1% CH4
 7 PPM CO
 19.5% O2

Water Roofed
 Battery Ram Car
 Pump power cable & discharge line from surface

Command Center with CCA on surface





Key Points up to first Ventilation

Team should not exceed 2 break limit before exploring over to #1 in B line

After finding the two persons in A line of #2 to #3 the team has material to airlock through doors of overcast and explore #1 side without exceeding 2 break limit.

At this point team has means to ventilate Barricade and should not continue to explore under Rule #41

Build in #1 to prevent air migration

Team does not need to ventilate to breach stopping just airlock

Team Stop #1 is in #2 entry due to contaminate in #1

Water Roofed If water is pumped it is gone

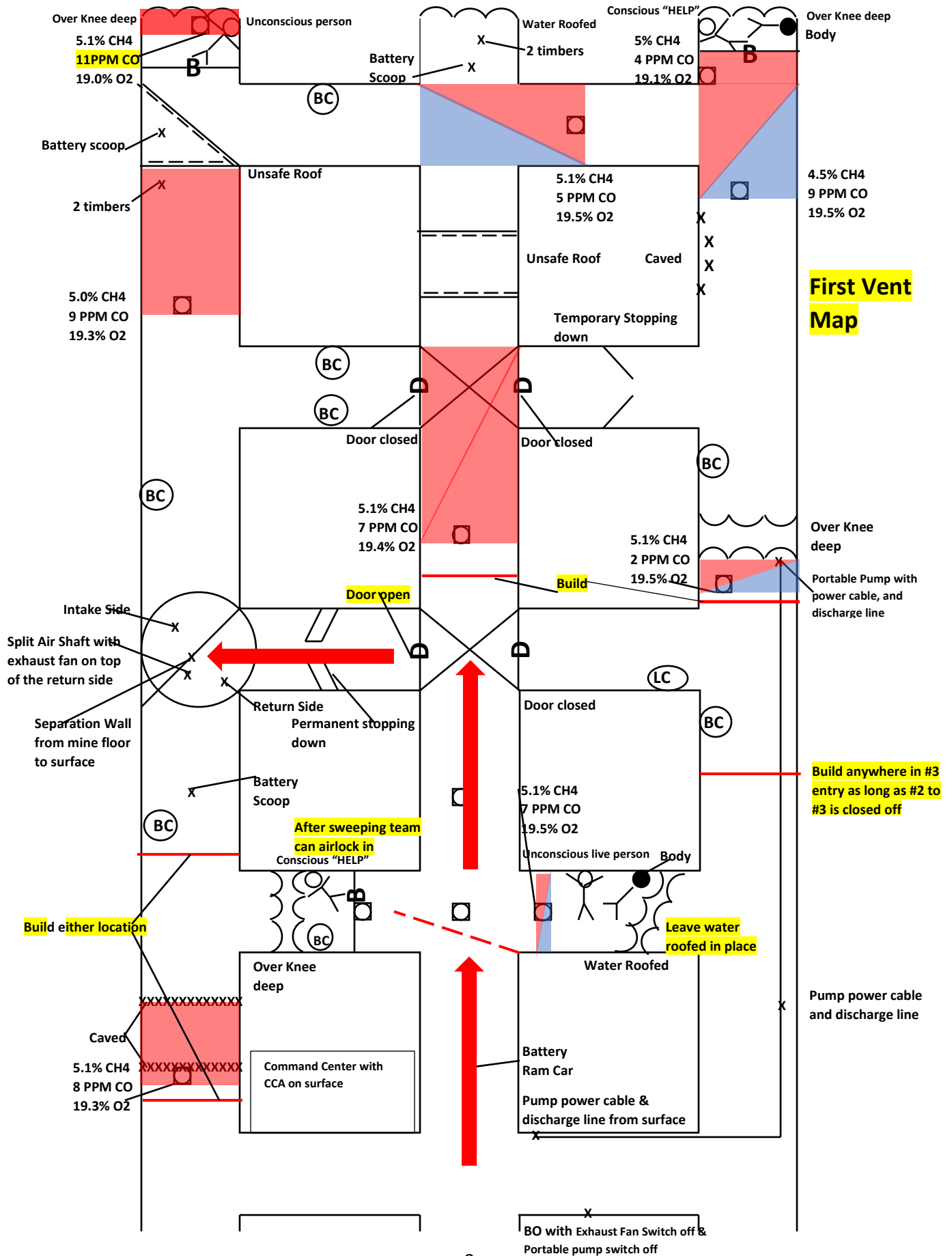
Build in #1 to prevent air migration

Over Knee deep
Portable Pump with power cable, and discharge line
Cannot clear explosive gas at water over knee deep so team cannot use pump at that location

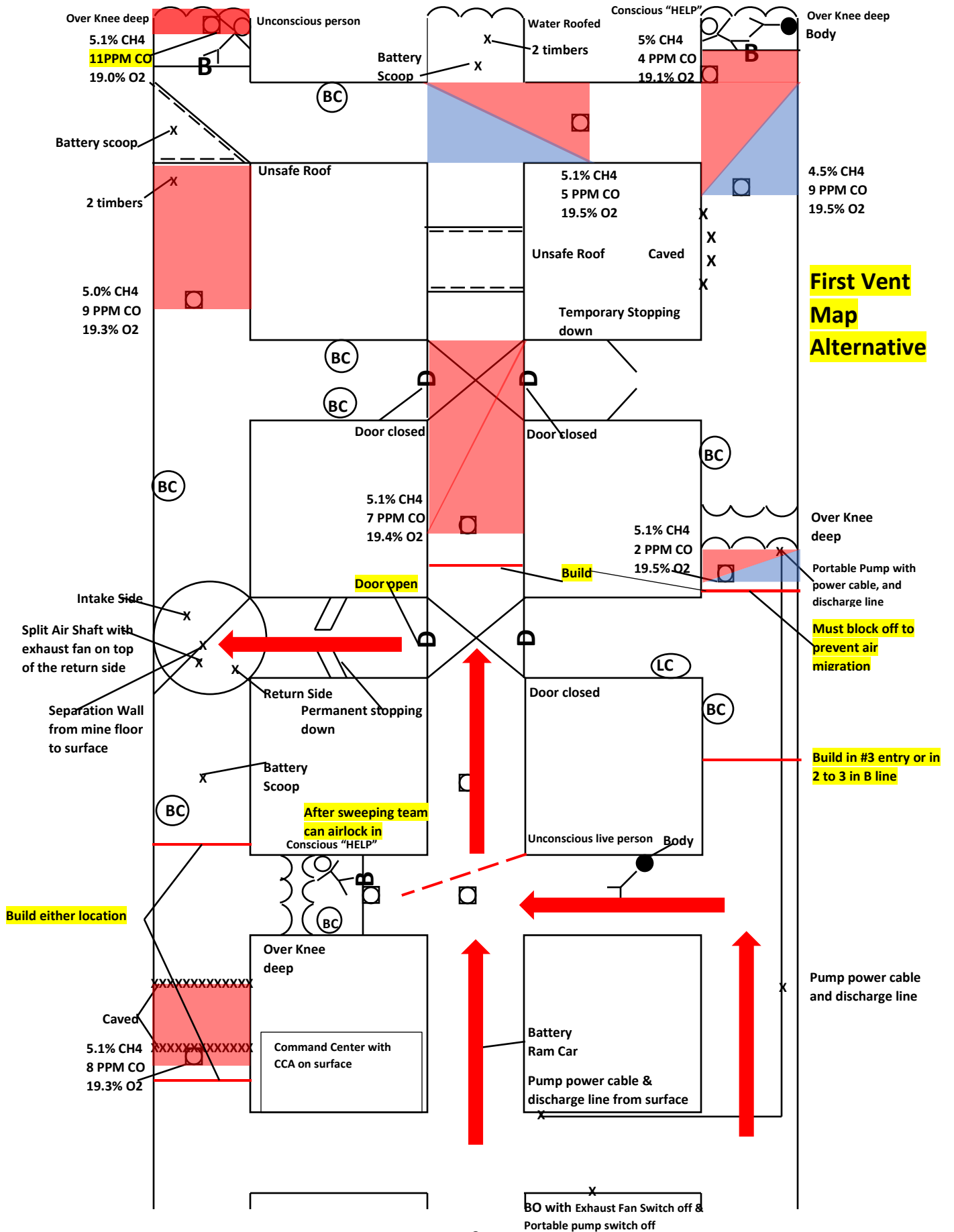
Remember that each ventilation change requires a re-test of the gas box in the affected area

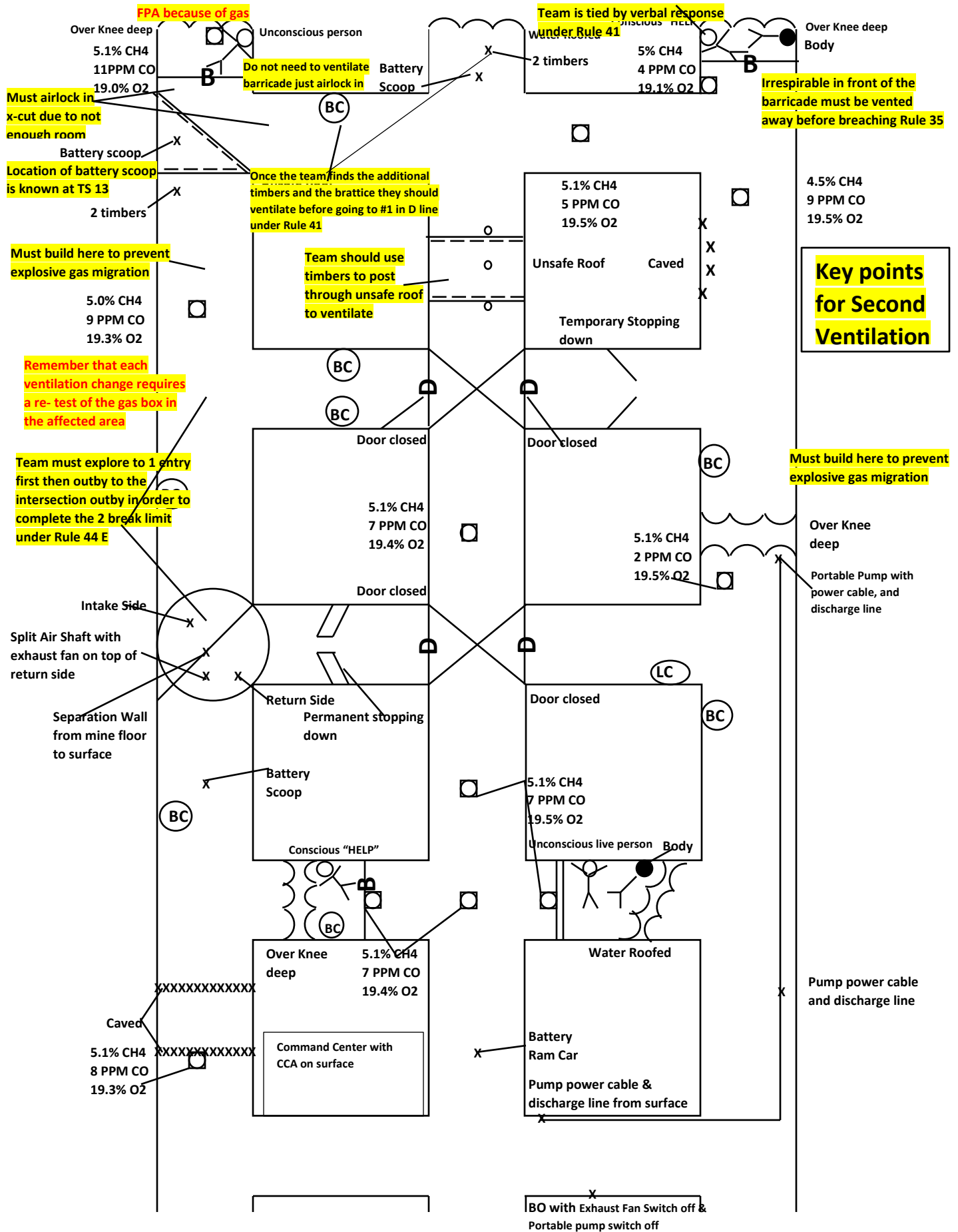
Team may move pump back to pump water after building airlock. Or airlock from #2 to #3 side without venting under Rule #42 since there is no response. This will give the team sufficient material to build at the overcast.

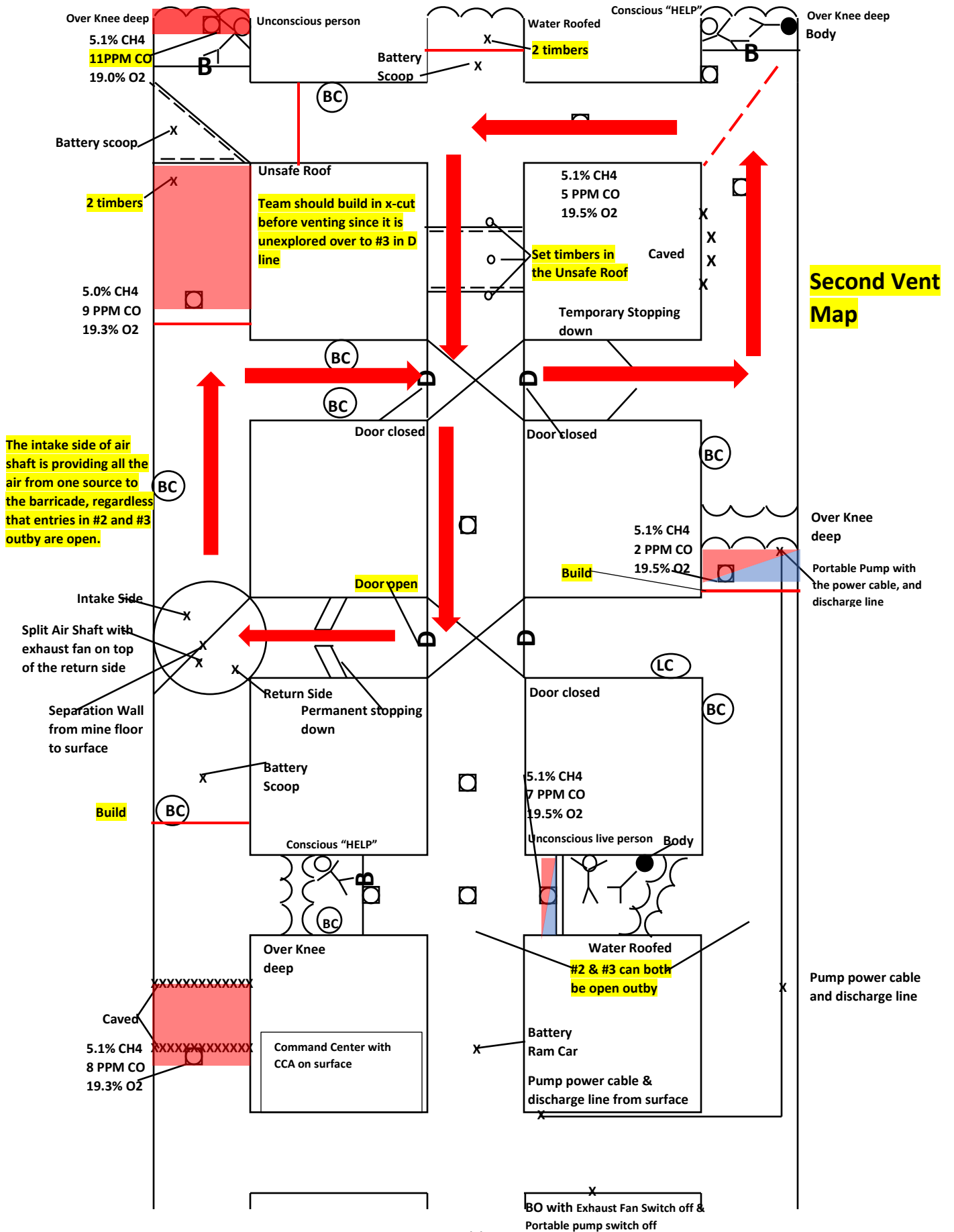
BO with Exhaust Fan Switch off & Portable pump switch off



BO with Exhaust Fan Switch off & Portable pump switch off







Team Stop No. 1

(See team stop map)

Team must travel to A line in no. 2 entry. Contaminant is found in no. 1 entry. Patient will yell "Help" when captain date & initials barricade this means the team is tied under **Rule #41 A**. The team must ventilate before breaching barricade. There is a stopping in x-cut 2 x 3 but team does not have material to breach it yet.

Team Stop No. 2, 3

Team can advance to B line in no. 2 entry or A line in no.3 entry due to the contaminant found above A line in #2 entry.

Team Stop No. 3, 4

Team can travel to B line in no. 3 entry or B line in no.2 entry. Team cannot pump the water over knee deep in no.3 entry due to the explosive air gas mixture found there. The team finds a brattice cloth outby B line in #3 entry, and a line curtain in the x-cut to #2, this gives the team means to breach the stopping in A line from #2 to #3 or if the team chooses, they can relocate the pump to the water roofed and build an airlock before pumping under **Rule #42**. One brattice cloth build is not enough to air lock through the overcast doors in #2 entry and they need to ventilate the barricade, so they need to find material to do this. Since they are blocked in #1, #2 and #3 entries they have means to airlock through the stopping from #2 to #3 in A line to look for more material and people.

Team Stop No. 5,

After they have breached the stopping in A line of 2 to 3 the team has material to airlock properly at the overcast door closed in B line of #2 entry, (see figure 6 page 49) they have tied both sides of the overcast from the #3 entry side so breaching from #2 to #3 is not required so they should breach the door towards toward #1 to explore to the shaft to ventilate the barricade. This will allow the team to reach Team Stop #5 in B line of #1 entry. Please note that from Team Stop #5 the team finds the intact separation wall on the return side of the air shaft that has the exhaust fan on top of it. As they reach outby from that team stop #5 they find a brattice build which is the material needed to ventilate the barricade in A line before continuing to explore outby. If the #5 breaks the inby imaginary line of A line in #1 entry before returning to ventilate the barricade they should be discounted for delay under **Rule #41 C**.

SEE VENT MAP 1

Team Stop No. 6

Team after they have ventilated the barricade in A line, and they should turn off the fan but it is not going to cause a problem if they don't. They should have taken the person outside will need to return to #1 entry to tie A line. This is so the two-break limit rule is maintained under **Rule #44**. It is possible once the team has breached the barricade and took the person out that they find there to re-locate the pump from #3 entry to

pump the water over knee deep in the crosscut to #1 entry in order to explore to #1 entry and tie for the two break limit under **Rule 44** also.

Team Stop No. 7

Team Stop #7 will be in C line of #2 entry at the overcast where the team should airlock as before inby and outby the overcast. The team should, **under Rule 44 E**, tie over to #1 entry of C then outby to B line before traveling inby C line.

Team Stop No. 8 or 9

Team could be in C line of #1 entry where the team has found three brattice builds and inby they find two timbers and unsafe roof across the entry the explosive gas mixture found in #1 does not extend into the unsafe roof. Teams should pick up the two timbers and they might choose to build across #1 entry inby.

Team Stop No. 8 or 9 or 10

Team could be in C line of #1 entry where the team has found the return side of the air shaft. The team should move outby to the intersection of #1 entry in B line this will tie the two-break requirement under Rule 44 E. At this intersection they find the intact separation wall on the intake side of the air shaft.

Team Stop No. 9 or 10

If the team chose Team Stop # 8 to be in #1 entry then **Team Stop #9** will be in B line of #1 entry they must tie outby in #1 in B line in the intersection of the return side of the split air shaft before advancing inby C line. If the team went to #3 entry of C line first the **Team Stop # 10** will be in #1 entry of B line.

Team Stop No. 11

The team should move inby to #3 entry of D line where they find a irrespirable air gas mixture inby the imaginary line of the intersection then a barricade. As soon as the captain breaks the imaginary line have the person behind the barricade yell "HELP". This ties the team to that person under **Rule #41**. Since the irrespirable at the barricade will need removed the team needs to continue to explore.

Team Stop No. 12

The team will move to #2 entry of D line where the team find unsafe roof across the entry and inby they find a battery scoop, two additional timbers, and water roofed. In the x-cut toward #1 entry the team will find a brattice build. The team now has the material needed to ventilate the barricade in #3 entry without exploring to #1 entry at this time. If they continue to explore to #1 entry of D line they should be discounted under **Rule 41 C** for delay. **Note** that the team should either turn of the fan or build back the barricade in # 3 entry to prevent air migration.

THEN SEE VENT 2 MAP FOR BARRICADE IN NO. 3 ENTRY D LINE

Team Stop No. 13

After retrieving the person from behind the barricade in #3 entry and taking him to the FAB the team still has a person missing and can return to D line to explore over to #1 entry. In the intersection because the team has found a diagonal unsafe roof in the intersection this requires a zig zag roof and rib test in the intersection and the Captain's presence will pass by the battery scoop in the intersection under the unsafe roof. Inby is a Barricade with no response from it. There is **NO** irrespirable in front of the barricade, so no ventilation is required just air lock in. The unsafe roof is on the imaginary line leaving only a foot to the barricade which is insufficient to allow a person to stand between safely. So, to prevent a team member from stepping into unsafe roof the Captain should build in the cross cut of #1 to #2 entries. Once inside the barricade the Captain finds an unconscious person then an explosive air gas mixture which has evidence of fire. This is a **Withdraw** situation under **Rule #31 B**, and the captain should not travel pass the gas mixture. The team should build back the barricade if the fan is still turned on and then remove the person from the mine.

End of problem

Patient Statement behind

Permanent Stopping in no. 2 & no. 3 entries.

Help!