

2023

Southeast Mine Rescue Contest



RC

Written Statement

Thank you for coming to help. You are in the fresh air base of the Volunteer #1 Mine. Earlier this morning, the section repairman and the chief electrician were on the phone talking about a damaged scoop tire. During their conversation, the repairman told the chief electrician he smelled cigarette smoke and was going to investigate. Shortly after this, the CO monitors began to alarm in the mine office. This mine has a history of methane and water inundations. One miner managed to escape and told us he thinks there was a methane explosion. Four miners are still unaccounted for.

The blowing fan is running, and the mine maps are up to date. We have a competent person to give and receive lifeline signals if necessary. Please locate the four missing miners. Thank you again and good luck!

Written Instructions

You have 75 minutes to complete the problem

The blowing fan cannot be stopped, stalled, or reversed

Explore all areas of the mine that can be done so safely

Locate all four missing miners and bring all survivors to the FAB

Judges Briefing

FAB: check all entries. GT & DI in #1, #2, and #3 entries. The team will air lock into #1 and #2 entries and conduct GT and place DI at the water over knee deep in each. Team will likely air lock and travel up #3 entry but could pump water in #1 and travel in that entry. If traveling in #3 entry: GT in entry and travel through knee deep water to team stop 1. If they pump water, they will have to perform a RR and DI at the unsafe roof in #1 entry.

Team Stop 1: GT, DI, & RR at unsafe roof in #3 entry. DI at permanent stopping in left crosscut, GT & DI at wall of overcast.

Team Stop 2: GT under overcast after team gets through the door. DI left door of overcast. GT & DI at water over knee deep, GT in inby #2 entry. GT in left crosscut.

Team Stop 3: GT, DI, & RR at unsafe roof. GT & DI at barricade. Patient will read statement when team reaches TS 3. Complete pump1 & vent 1. After gases are clear, breach barricade, GT DI at water over knee deep. No way to vent or pump water over knee deep.

Pump 1: move pump to outby side of water over knee deep in #1 entry.

Vent 1: Move battery mine phone. Build in #2 and #3. Remove stoppings in #1 and #3 entries. Build between 2&3 in FAB. Hang line curtain at barricade.

Team Stop 4: RR at caved corner. GT & DI at partial stopping in right crosscut. GT & DI at water over knee deep in left crosscut. GT & DI at water over knee deep in #2 entry.

Team Stop 5: RR at caved, GT, RR, & DI at unsafe roof. GT inby in #1 entry.

Team Stop 6: GT RR DI at unsafe roof. GT DI & RR at fire. Extinguish fire. Team must be on lifeline as soon as captain breaks plane of smoke (even if his hand breaks plane). To advance, the team must tie off at the corner in team stop 6.

Team Stop 7: Team must be on lifeline. Touch and DI body. GT RR DI in face. Open dinner bucket, no note. GT DI RR at unsafe roof in left crosscut.

Pump 2: take pump to water over knee deep in #2 entry. Turn pump on. Water removed.

Team Stop 8: DI both overcast doors. GT, RR, & DI at unsafe, GT in left crosscut. GT inby.

Team Stop 9: GT inby. GT & DI at water over knee deep outby. *Team cannot make it all the way to the plane outby #1 entry at this team stop due to water over knee deep. Once water is pumped, team cannot advance until captain makes it to the plane.

Pump 3: pump water over knee deep in #3 entry.

Team Stop 10: GT in crosscut to tie back. GT DI at outby water over knee deep. Assess patient. Load patient on stretcher and bring to FAB. Patient must be placed under apparatus because they will be taken through irrespirable atmosphere. Must take patient to FAB before pumping water outby patient or it is a discount under Rule 41(b).

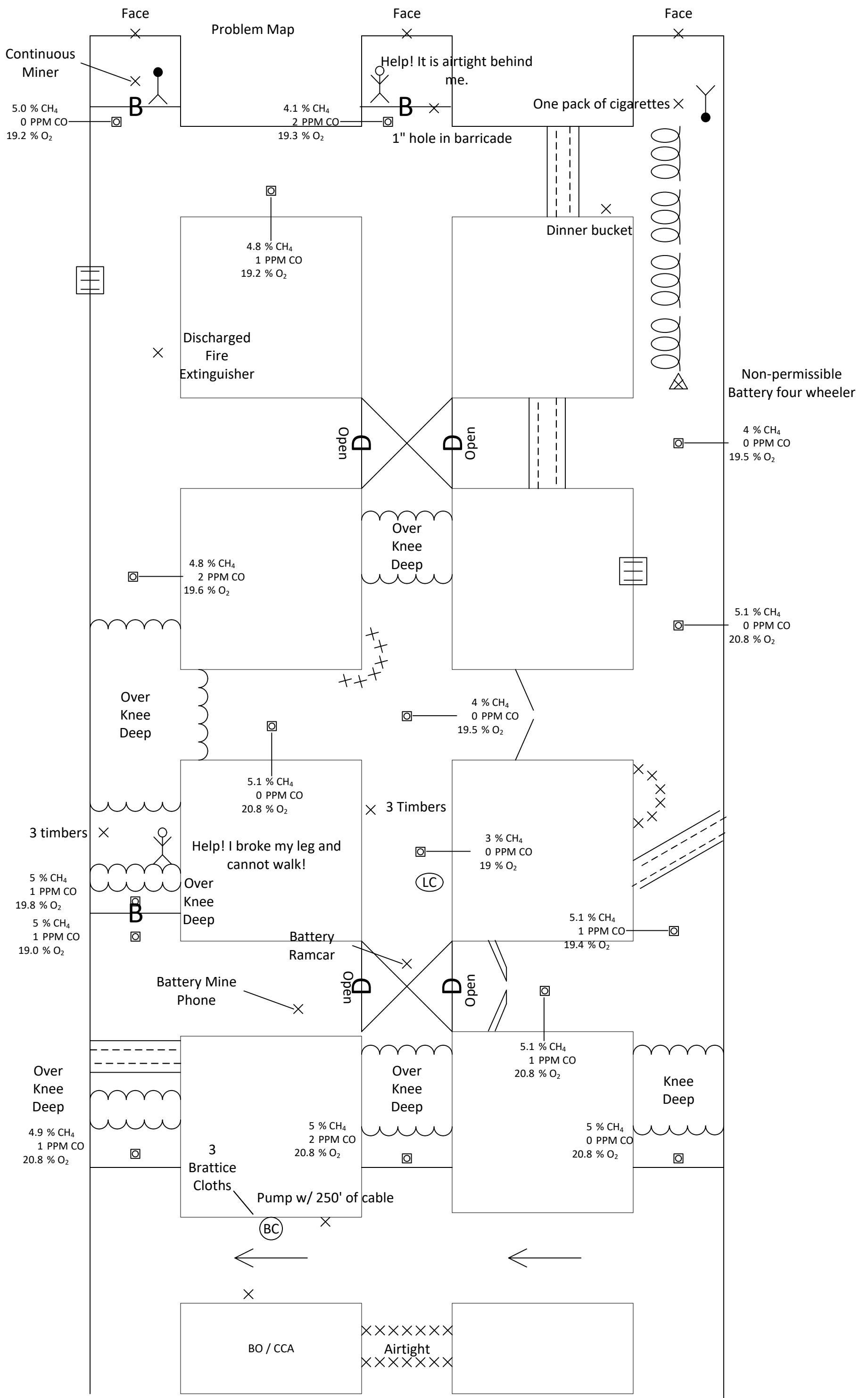
Team Stop 11 (#2 entry): Patient reads statement. GT RR DI at unsafe roof in crosscut. GT & DI at barricade, knock on barricade. Since the barricade has a hole, it is not airtight, this does not stop team travel and the team does not have to air lock or vent to enter. Breach barricade, assess patient and place them under apparatus because they will have to travel through irrespirable atmosphere. Bring patient to FAB. If the team does vent to remove the irrespirable before entering the barricade, it will be a delay.

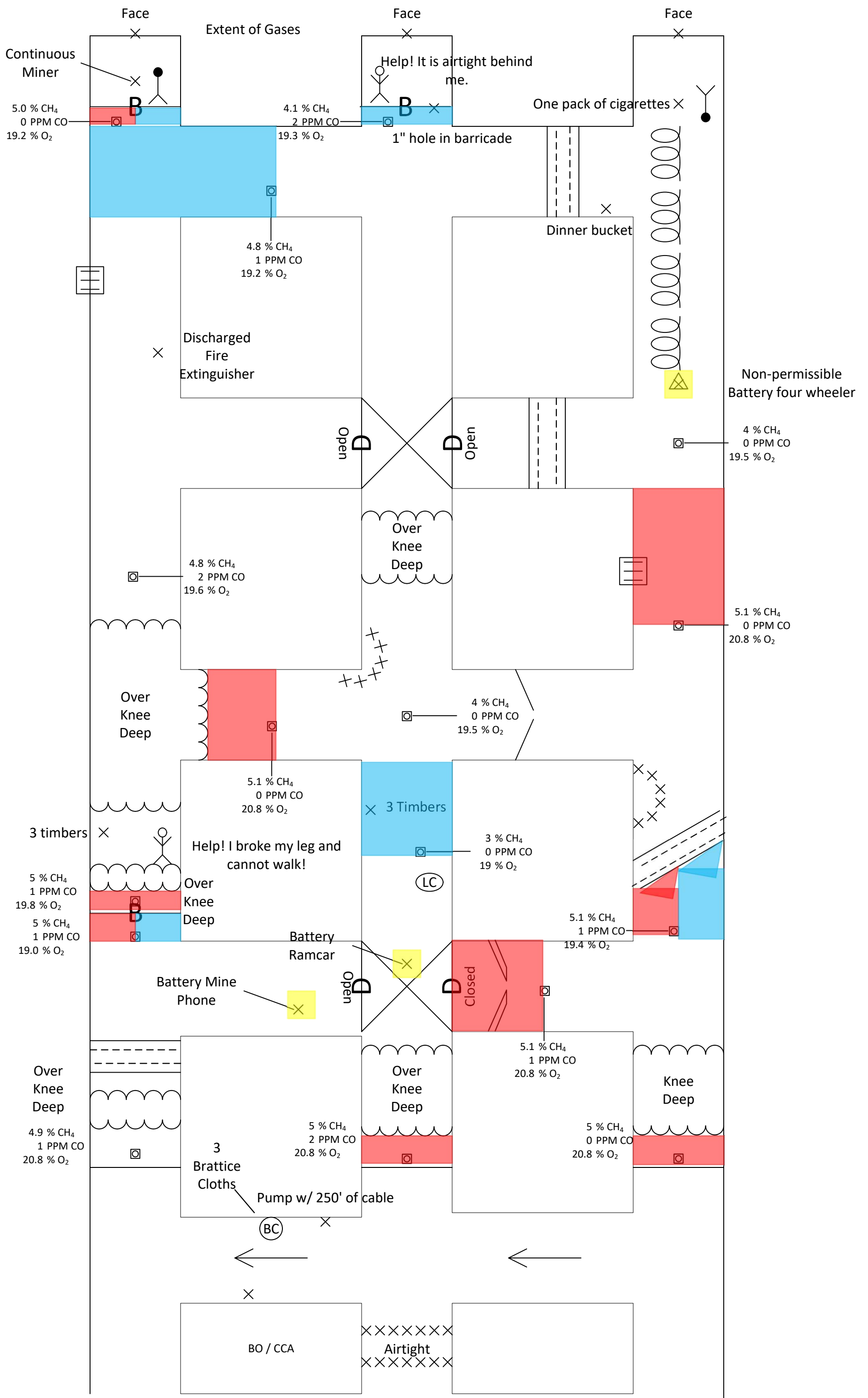
Team Stop 12 (#1 entry): GT, RR, & DI at barricade (no response). Tie back in #1 entry.

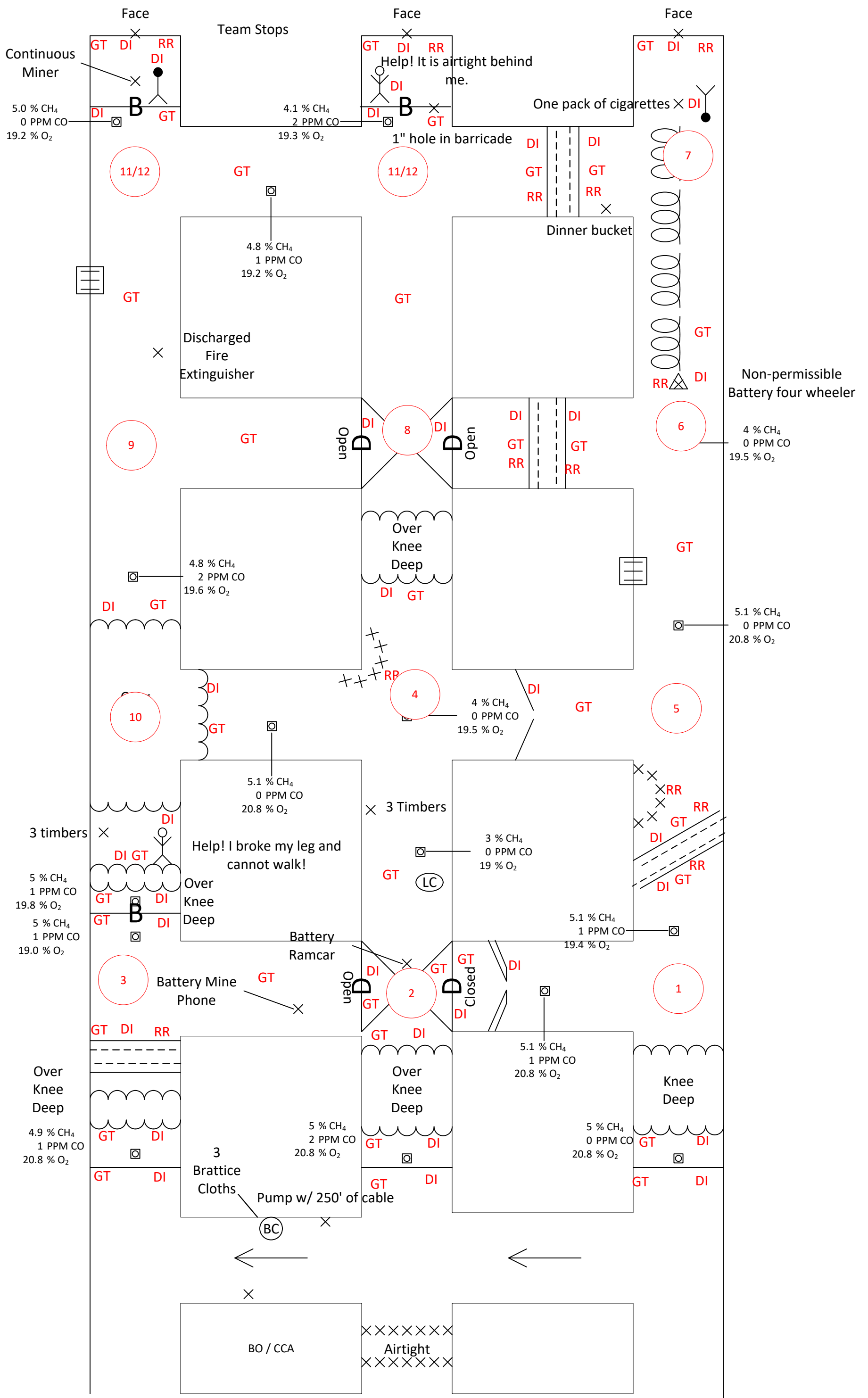
Pump 4: Move pump to water over knee deep at CC 2 in #1 entry.

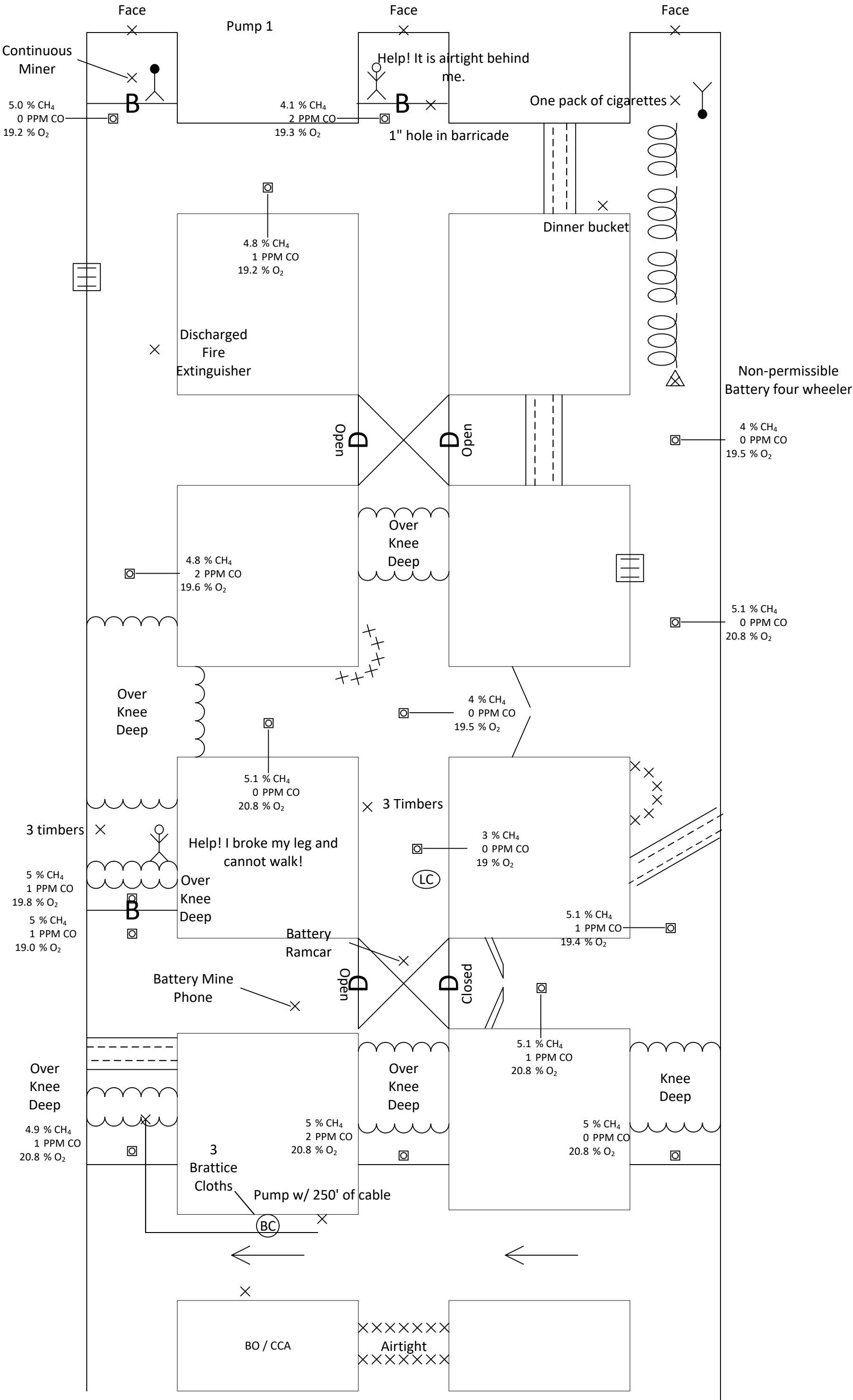
Vent 2: Close left outby overcast door. Build diagonal in #2 entry, crosscut #3. Build in #3 entry at non-permissible four-wheeler. Open right-side door and close left side door on inby overcast. Build in #2 entry outby overcast or in crosscut. Timber through unsafe roof beside inby overcast. Remove stopping in #2 and #1 entry at FAB. Build between 2&1 in FAB must remove stopping in #1 before building or it will stall the fan. Hang line curtain in front of barricade in #1. After vent 2, air lock and enter barricade. GT RR DI at the face. Touch and DI body.

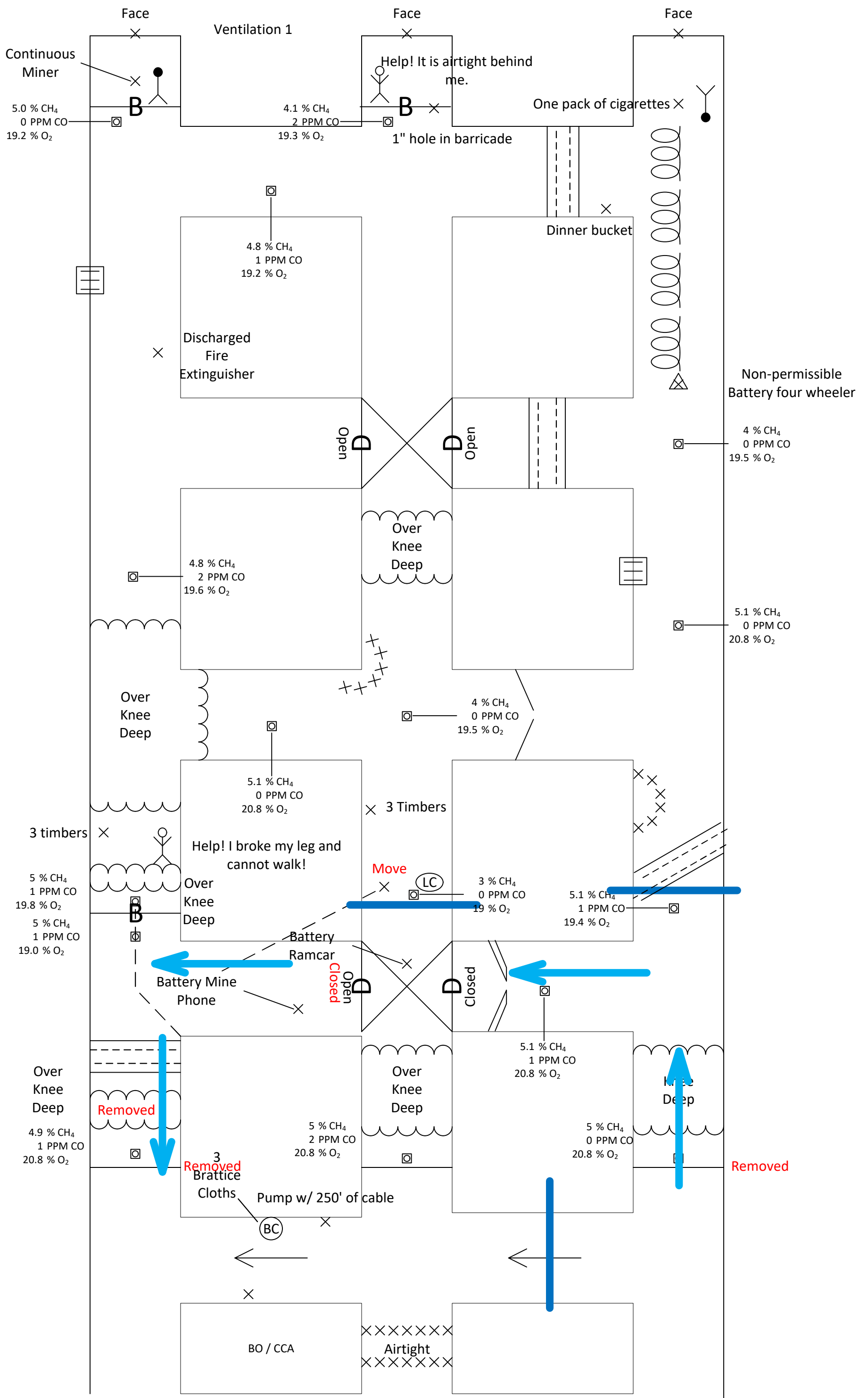
Retreat to FAB and stop clock.

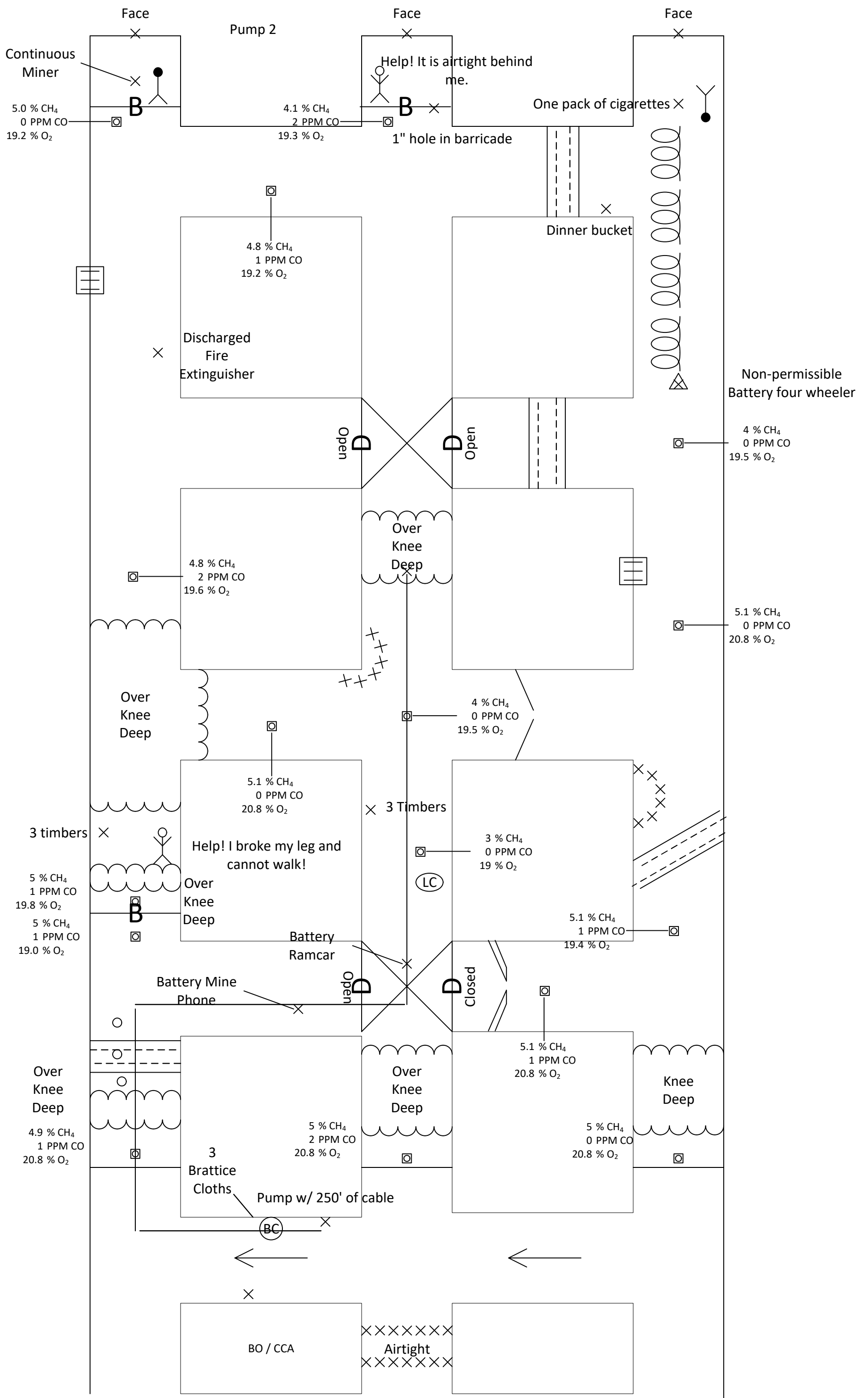


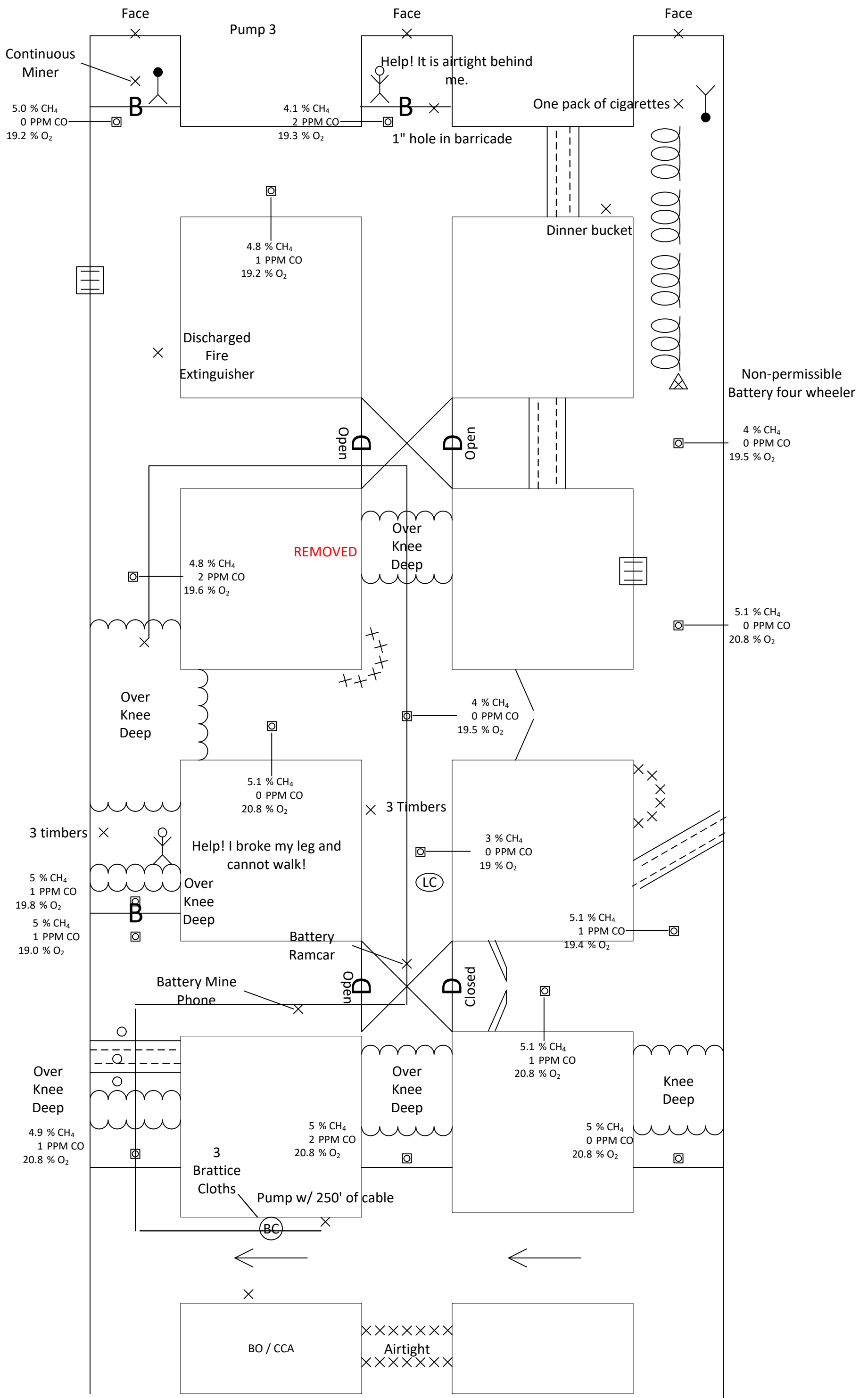


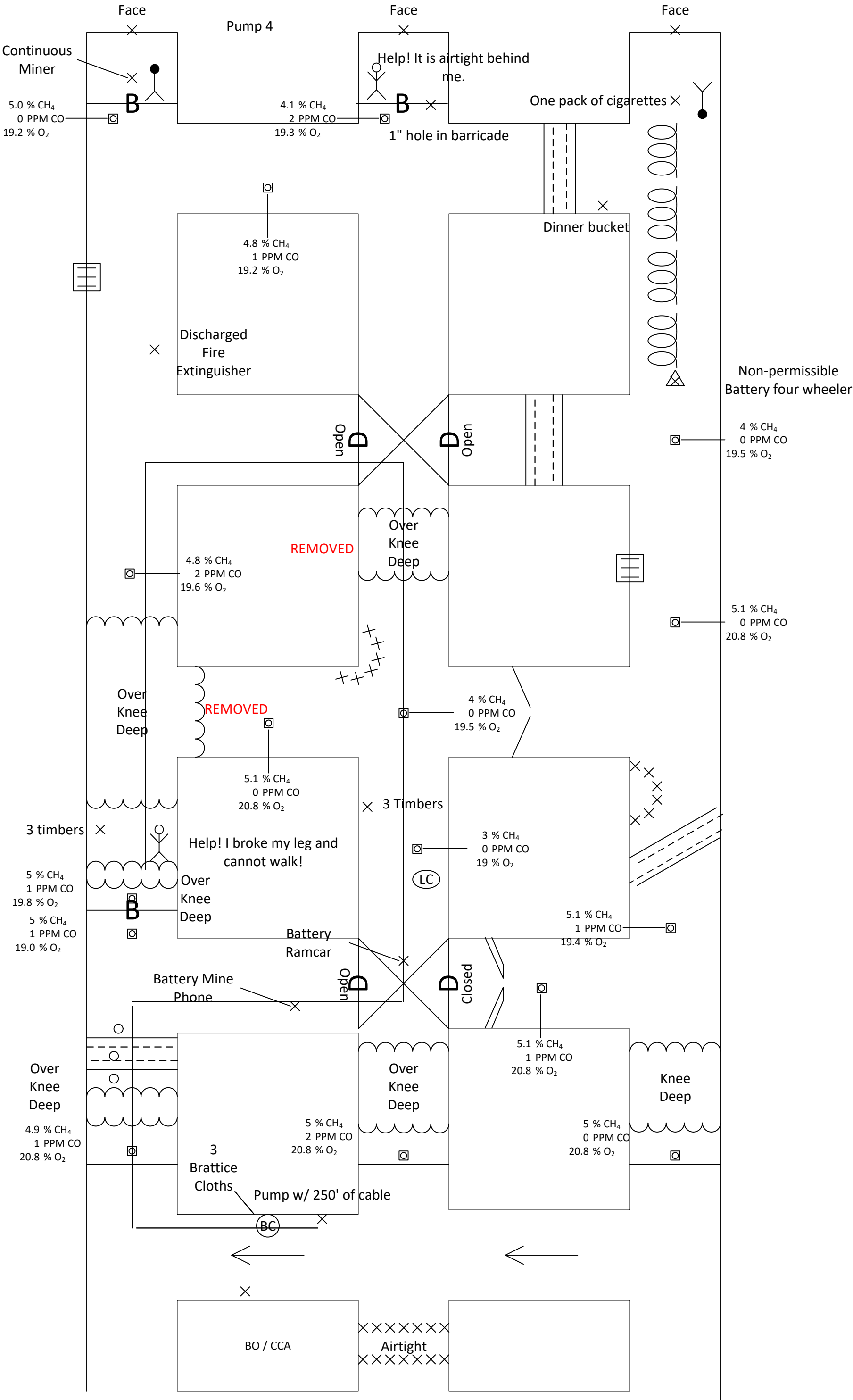


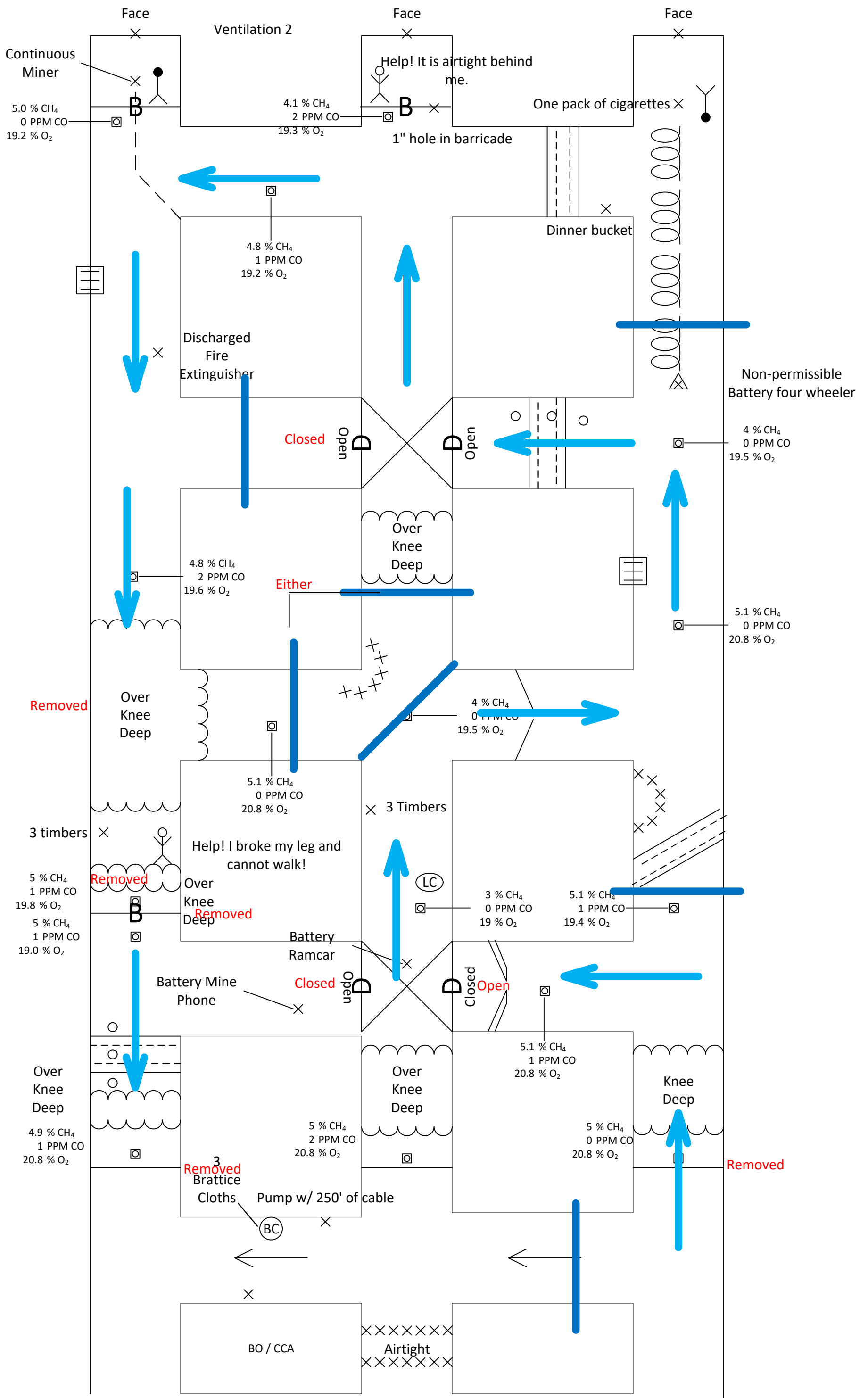


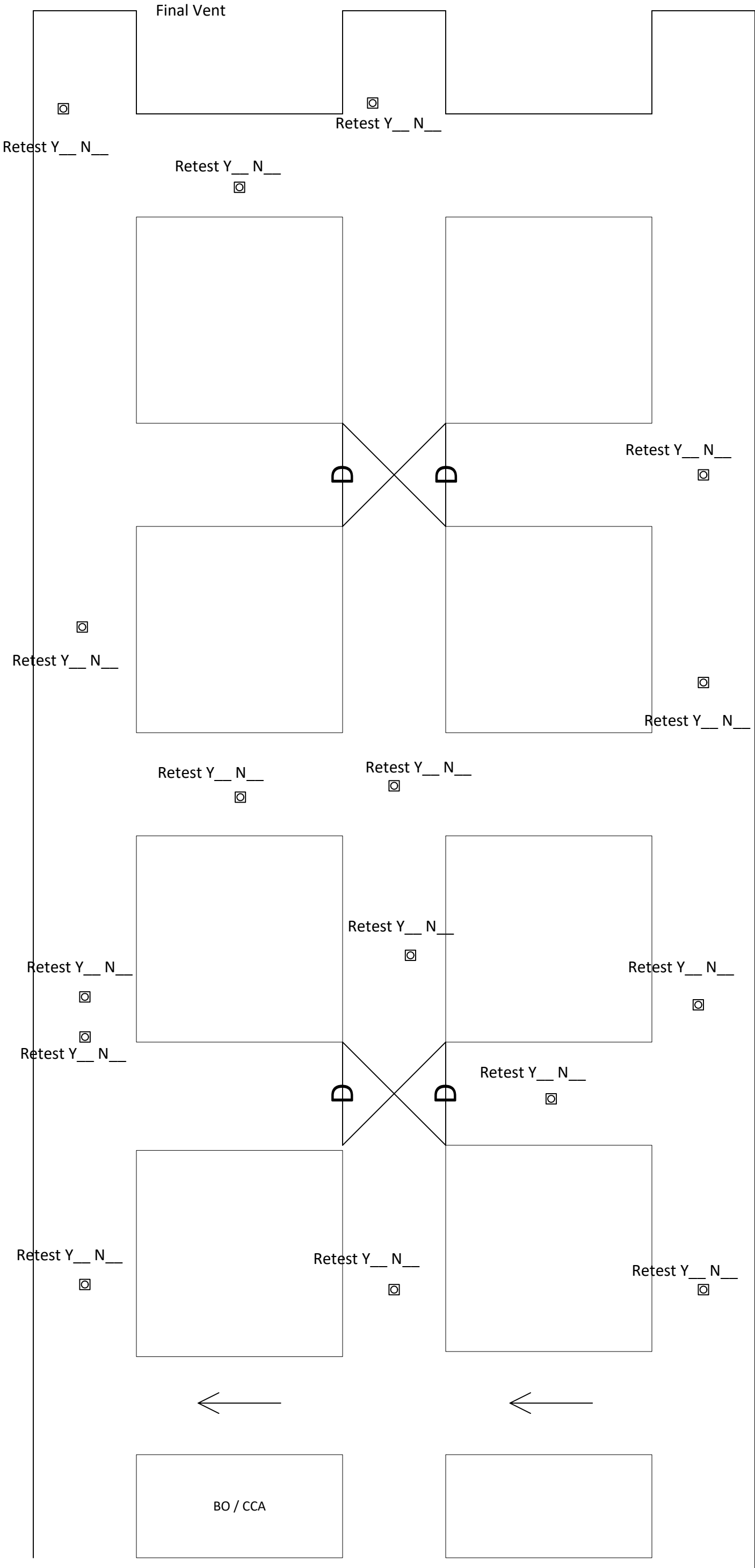












Help! I broke
my leg and
cannot walk!

Help! It is
airtight
behind me.