## 2021 Southern West Virginia contest Written Information

Thanks for coming to our call for help. We have two employees unaccounted for and need your help to locate them. Here is all the background information we have at this time. The two employees were assigned to clean and dust the section on the midnight shift, and did not return to the surface at the end of their shift. All attempts to contact the missing employees have failed. The Mine Foreman traveled to the section and found the ventilation had been rerouted across the section approximately four crosscuts outby the face and all ventilation inby that point had stopped. The mine has a history of multiple mine gases and low oxygen levels. The Mine Foreman came to the surface and called for agency help and mine rescue assistance. This is a complicated mining system with multiple levels of mining and interconnected air shafts. The missing employees are located in the lower mine. The upper mine is located 125 feet above the lower mine. The two mines are connected by an airshaft two crosscuts outby the face in the #2 entry. Here is how the connected shafts work. Air enters the upper-level mine from a blowing fan located on the surface of the #1 entry. Intake air travels through that mine and down the intake side of the shaft to the lower-level mine to help ventilate the lower-level mine. This fan is off now but can be turned on and off at the team's request. The upper level mine has been explored and no gases were found. The return side of the shaft is not connected to the upper-level mine and vents directly to the surface. The lower-level mine is also ventilated by an exhaust fan located on the surface of the #1 entry outby the fresh-air base. This fan must remain on to ventilate the area outby the fresh-air base. Neither fan has the ability to be reversed. All state and federal agencies are on site. Backup mine rescue teams are available if needed in an emergency. This is all the information I have at this time. Good Luck!

## Southern West Virginia Mine Rescue Contest Written Information

- Explore the entire mine that can be done safely
- Account for all missing miners
- Bring all survivors to the Fresh-air base
- The lower-level mine exhaust fan cannot be stopped,
   Stalled or reversed
- The upper mine blowing fan cannot be stalled or reversed







