I am __________, Superintendent of the Liberty No. 2 Mine. You will begin work at the fresh air base in the Main North Section. The Main North Section consists of five entries being driven to develop the north part of the mine. The Nos. 1 and 5 entries are return entries, and the Nos. 2, 3, and 4 entries are intake entries.

A five-man crew entered the mine on the afternoon shift and traveled to the Main North Section to begin production activities.

At the conclusion of the afternoon shift, the crew failed to return to the surface. Attempts to communicate with the section were unsuccessful. Mine rescue teams traveled into Main North in an attempt to reach the crew. They explored the No. 1 and 5 entries to the faces and explored the Nos. 2, 3, and 4 entries to the fifth crosscut outby the faces where they established a fresh air base. A detailed map of the area explored and the conditions encountered was prepared by the teams.

The mine is ventilated by an exhaust fan on the surface. The fan is operating and must remain on to provide ventilation to the mine. The fan cannot be reversed.

All electrical circuits in Main North have been de-energized, locked out and guarded.
The coal seam being mined is walking height and the roof is supported by roof bolts.

Two mine rescue teams will serve as back up while you are working. One team will be located at the regulator in the No. 1 entry and one will be located at the regulator in the No. 5 entry. They do not have material or supplies to build any ventilation structures. They are limited to opening or closing the regulators and can do so simultaneously. You may request assistance from them through the superintendent. Each request for assistance will take two minutes. The team will mark the changes on the map, initial the map, and present the map to the superintendent who will notify them when the changes are completed. No additional work, including exploration, will be permitted during this two minute time period; however, apparatus checks can be made.

The solid line map of the Main North Section is up-to-date.

Written instructions and the following mine maps will be provided when you are ready to work:

1. Two blank maps;
2. Two maps indicating the ventilation prior to the accident;
3. Two maps indicating the ventilation after the incident and the areas explored prior to your arrival.

Good Luck.
The 10th Annual Post 5 Mine Rescue Contest

August 2, 2006

Problem

(Written Instructions)

ACCOUNT FOR ALL MISSING PERSONS.

EXPLORE ALL AREAS OF THE MINE THAT CAN BE SAFELY EXAMINED.
NMRA - Post 5 Mine Rescue Contest
August 2, 2006

No. 2 Face
- Continuous Mining Machine
- CH4 - 1.2%
- Battery Ram Car
- Closed
- Airtight

No. 3 Face
- Conscious
- CH4 - 9%
- O2 - 17%
- Air Clear
- Battery Ram Car

No. 4 Face
- CH4 - 9%
- O2 - 17%
- Battery Scoop Car
- Over Knee Scoop Car
- Over Knee Deep

Scoop Car Batteries
- Closed
- Airtight

1" = 20 feet
Team Stops

12
3 4 5
6
7 8 9
10 11 12
3 4 5
2 1 6
FAB
Ventilation Prior To The Incident

No. 1  No. 2  No. 3  No. 4  No. 5

- G - C - C -

Open  Open
Ventilation After The Incident And Areas Explored

CH4 - 9%
O2 - 17%

No. 1 No. 2 No. 3 No. 4 No. 5

B.O.

Area Unexplored
1. Team will explore entire mine and recover patient from barricade in No. 3 entry
2. Team will use barricade to build a temporary stopping in the No. 3 entry, inby or outby the unsafe roof
3. Team will open the door in the 3rd crosscut inby the FAB between the No. 1 and No. 2 entries
4. Outby team will open the regulator in the No. 1 entry
1. Outby team will close the regulator in the No. 1 entry. (Team will close the door in the 3rd crosscut between No. 1 and 2 entries.
2. Team will remove the temporary stopping previously built in the No. 3 entry.
3. Team will open the door in the 3rd crosscut inby the FAB between No. 4 and No. 5 entries.
4. Outby Team will open the regulator in the No. 5 entry.
1. Outby team will close the regulator in the No. 5 entry.
   Note: Door in 3rd crosscut between No. 4 and No. 5 entry remains open
2. Team will advance to the No. 3 entry between the 3rd and 4th crosscut and build a temporary stopping from the inby side.
3. Team will instruct outby team to open regulator in No. 1 entry.
4. Team will hold up line curtain, clear barricade, and recover the patient.
5. Team will build airlock to retreat from No. 3 entry or instruct outby team to close the regulator in the No. 1 entry.
NMRA - Post 5 Mine Rescue Contest
August 2, 2006

No. 1
Roof Bolting Machine
CH4 - 9%
O2 - 17%
Airtight
Closed

No. 2
Continuous Mining Machine
CH4 - 1.2%
Airtight
Closed

No. 3
Continuous Mining Machine
CH4 - 9%
O2 - 17%
Battery Ram Car
Air Clear

No. 4
Continuous Mining Machine
CH4 - 9%
O2 - 17%
Battery Ram Car

No. 5
Continuous Mining Machine
CH4 - 9%
O2 - 17%

Battery Scoop Car
Over Knee Deep

Scoop Car Batteries
Closed

LC
Patient Statement

Help! Get Me Out
It’s Airtight Behind Me