





Interactive Scenario Role Play: Emergency Response & Rescue Group Exercise

Allison Golsby



Health, Safety, Environment & Community



The Scenario



➤ Delegates need to form into "Emergency Response Teams". These ERT Teams have 30 minutes to devise an emergency response form of action.



The Super Pit, 16 May 2011, http://www.superpit.com.au/PhotoLibrary/General/tabid/181/Default.aspx



The Scenario continued



The Scenario

- 1. New Mine Holdings Limited ("NMHL") has a mining lease over 4,000 hectares of rural land. There are 6 portable buildings on the surface containing the staff canteen, offices and the Communications Room. There is only a six wire strand rural fence surrounding the mine. There is no front gate.
- 2. In 2008, NMHL completed an extensive drilling program in an attempt to prove up their resource. NMHL are hoping to complete an Initial Public Offering (IPO) during 2011 to raise \$100M from the public to exploit the coal reserves.
- 3. The drilling program produced results that appear to indicate a billion tones of 'inferred resource' as defined by JORC. However the coal lease is dissected by a large sandstone ridge 10 kilometres long, 500 metres wide from the North and widening out to 1 kilometre wide as the ridge runs to the South.
- 4. The coal to the East of this ridge appears to be high quality coking coal layered in thick seams between 5 metres at the North East to 20 metres deep as the seam runs South. The coal to the West of the ridge appears to be layered in shorter seams between 5 metres deep at the North West to 3 metres as the seam runs South.



The Scenario continued



- 5. The coal samples taken appeared to indicate large volumes of insitu gases. Both CH4 and C02 are present. The coal appears to have a high propensity for spontaneous combustion. A predevelopment gas drainage program was completed.
- 6. From the North, NMHL cut a drive along the sandstone ridge for approximately 1.5 kilometres long at a depth of 400 metres. This drive is called "the North Drive". Development drives were then cut from the North Drive to form the East Drive and the West Drive to intersect the coal seams. NMHL has commenced cutting some coal from each of the seams in a bord & pillar configuration to obtain coal samples for customers to test. NMHL intends to develop longwall blocks as the mining progresses. Work on the North Drive continues, with the intention of cutting further East and West drives.
- 7. Machinery underground includes diesel powered road headers cutting extensions to the North Drive and electrically powered continuous miners and shuttle cars cutting the coal.
- 8. Ventilation shafts were cut by raise bore in the North Drive 1 kilometre from the Entrance; in the East Drive 800 metres from the intersection with the North Drive and in the West Drive 500 metres from the intersection with the North Drive. Each of the ventilation shafts is fitted on the surface with ventilation fans. Brattice and ventilation stoppings were installed as recommended by the Ventilation Officer in accordance with the Ventilation Plan.



The Incident



- 1. At 6:30am, this morning the ventilation fan blew off the top of the West Drive ventilation shaft and was seen to lift 10 metres or more into the air before landing on the staff canteen, where it remains. From the surface, there was observed to be a large plume of dust exiting from the West Drive ventilation shaft, with smaller dust clouds exiting from the North Drive ventilation shaft, the East Drive ventilation shaft and from the entrance to the North Drive. There were reports from the surface of a loud noise like a freight train passing that lasted for some minutes, then stopped.
- 2. At 6:35am communications between the Communications Room on the surface and the crib room in the East Drive indicated the sounds of seismic activity, large volumes of dust and smoke underground, difficulty in breathing and greatly restricted visibility. Communications to any point underground then ceased and have not been reestablished.
- 3. At 6:45am some small volumes of smoke commenced exiting from the East Drive ventilation shaft, but not from the North Drive ventilation shaft, the West Drive ventilation shaft or the entrance to the North Drive.
- 4. The tag board on the surface appears to indicate that there are 20 personnel underground, but the Communication Room Operator reports that compliance with the tag board protocols has not been robust and there have been instances in the past of personnel underground with no tag on the board and vice versa. Half the workforce is contractors, engaged on contracts with infrastructure companies to cut drives. They do not report to the Communications Room, but to their own line managers.



The Incident continued



- 5. The SSE, UMM and Ventilation Officer are interstate giving presentations to investors manqué and cannot be reached. The mine plans are locked in the UMM's office, to which he alone has the key.
- 6. Your Emergency Response Team arrived on site at 7:30am and received the above briefing from the Communication Room Operator, who feeling sick wants to go home. His replacement has not arrived on site. General Mine Shift change is scheduled for 3:00pm.
- 7. When you arrived, the press was present in force, together with the families and friends of the miners concerned for their welfare. On arrival your ERT was asked to respond to questions from those assembled and to participate in a live TV broadcast.



The Incident continued



➤ ER Teams will have to present their response and must be ready to answer contingency questions that will test the flexibility and comprehension of their reactive plan.









Interactive Scenario Role Play: Emergency Response & Rescue Group Exercise

Allison Golsby



Health, Safety, Environment & Community