

Examination Panel Report for Under Manager – September / November 2010

APPLICATIONS

Number applied: 19	Number approved: 19
Overall comments:	
<ul style="list-style-type: none"> • Candidates appear to have been benefiting from the briefing sessions provided on exam technique and requirements. • Examiners expect candidates to answer questions in accordance with a management model philosophy that incorporates the statutory framework that prevails in NSW coal mines. This management approach must be able to effectively deal with the planned and unplanned events that are presented in the questions. • Some candidates who can demonstrate this management approach are not showing the appropriate level of practical industry knowledge or expertise commensurate with the expectations of an Under Manager. • Candidates must approach answers from the perspective of Under Manager, which is from a whole of mine approach. 	

WRITTEN EXAMINATION

Dates:	7 September 2010
Number of candidates:	19
Passed:	11 (= 57.9 % success rate)
Total marks:	400
Highest mark:	283
Average mark:	239
Examination Papers - Part B -	
- Mining Legislation (UB1), Mine Ventilation (UB2) and Coal Mining Practice (UB3)	
Overall comments:	
<ul style="list-style-type: none"> • Legislation: Typical questions relating to the role of Under Manager were asked. Dot point answers that show the intent of the legislation are acceptable. • Coal Mining Practice: As previously mentioned in the overall comments. A management approach incorporating the statutory framework is required. Poor marks are generally as a result of inadequate knowledge of subject matter, poor risk management (hence, application of the statutory framework), poor organisation and not enough consideration of whole of mine issues when focusing on the problem presented. Questions asked are scenarios that are applicable to underground coal mining. These scenarios should be used as case 	

studies for detailed analysis as exam preparation.

- **Ventilation:** We continue to see a number of candidates making assumptions regarding mine pressures, resistances, ventilation efficiencies and quantities, with very little or no explanation of what the assumption is based on. Despite this a number of candidates appear to have a very good understanding of ventilation principles and the relationship between resistance, quantities and pressure. It must be stated again that any assumption must reflect the mine plan which the exam is based on.

1. The results from the Graham's Ratio question in the second part of the Ventilation paper were mixed with 10 out of the 19 candidates achieving a mark greater than 80%.

Six candidates out of 19 failed to achieve a mark greater than 50% for this question.

2. A number of candidates assumed very low ventilation efficiency figures for the main mine plan despite the mine plan (once old goaves were sealed) being simplified in layout with very few ventilation structures in play.

Those candidates who failed to recognise the ventilation constraints inherent in this mine plan and exam question failed to achieve high marks.

ORAL EXAMINATION

Dates:	10-12 November 2010
Number of candidates:	18
Passed:	10 (= 55.5 % success rate)
Analysis of questions topics on which candidates were not yet competent	
Topic examined	
<ul style="list-style-type: none">○ Benchmarking knowledge and core risk management: Candidates can be asked to describe their industry benchmarking experiences, especially in relation to core risk management at the sites visited.○ Extensive benchmarking has been shown to significantly improve candidates' performance in the oral exam.○ Candidates must be able to describe the statutory or legislative framework in which NSW coal mines are operated. Some candidates could not apply this in scenarios presented, eg the requirements for dealing with certain notifiable incidents.○ Some candidates have difficulty with gas management in a pillar panel with brattice. Improved hazard identification would better identify problem solving methods.○ Pillar extraction needs to be better understood.○ A whole of mine approach is essential and is sometimes forgotten when dealing with problems. Candidates must focus on issues that can affect the whole mine as a result of the actions they are undertaking by solving the problem presented at the time.○ Some candidates did not see it necessary to leave the surface and attend a problem site, even though a very unusual circumstance was occurring underground. This can be satisfactory, however in some scenarios presented during the oral exam, it would have been more appropriate to inspect the area in question after whole of mine matters were dealt with.○ Some candidates' range of hazard identification was too narrow for that of an Under Manager	