



# **EXAMINATION PANEL REPORT FOR OPEN CUT EXAMINERS AUGUST 2013**

## **EXAMINATION ROUND SUMMARY:**

### **APPLICATIONS**

**Number applied:** 61  
**Number approved:** 60

**Comments on applications received:** Generally the standard was again poor with candidates not preparing themselves properly

### **WRITTEN EXAMINATIONS**

**Date:** 15 August 2013  
**Number of candidates:** 54  
**Did Not Sit:** 6  
**Passed:** 20 (37% success rate)

**Highest mark:** 243 marks  
**Average mark:** 170

### **ORAL EXAMINATIONS**

**Dates:** 22-24 October 2013

**Number of candidates:** 26  
**Eligible but Did not sit:** 9  
**Passed:** 13 (54% success rate)

## **WRITTEN EXAMINATION PAPER ANALYSES**

### **OCE1 Mining Legislation** - Paper total 100 marks

<b>Number of candidates:</b>	51
<b>Minimum mark obtained:</b>	5
<b>Maximum mark obtained:</b>	90
<b>Average mark obtained:</b>	47

**Comments on OCE1 paper:** A lot of the candidates failed to use the WH&S Act and Regs when answering the legislation questions

#### **Analysis of Answers to Questions:**

##### **Question 1 - (Worth 20 Marks)**

*This question is in two parts and asks if each are a reportable incident and for a reason why it is or isn't reportable. The first part notes a power pole falling and striking a vehicle (10 marks), the second part notes a vehicle striking a vehicle (10 marks).*

<b>Minimum mark obtained:</b>	0
<b>Maximum mark obtained:</b>	20
<b>Average mark obtained:</b>	11

The candidates failed to recognise that these 2 incidents were not reportable. They insisted on assuming facts that were not supplied. In the first case there was no threat to life. The case had the vehicles approaching the mine but not yet on the mine site and therefore it was a police matter.

##### **Question 2 - (Worth 20 marks)**

*This question asks you when you must consult with workers?*

<b>Minimum mark obtained:</b>	0
<b>Maximum mark obtained:</b>	20
<b>Average mark obtained:</b>	16

The candidates generally answered the question well but some forgot about the WH&S legislation.

##### **Question 3 - (Worth 20 marks)**

*This question asks you what the offences are relating to Inspectors.*

<b>Minimum mark obtained:</b>	0
<b>Maximum mark obtained:</b>	20
<b>Average mark obtained:</b>	9

The WH&S Act Part 9 Division 6 – Offences in relation to Inspectors Section 188, 189 & 190

**Question 4 - (Worth 20 marks)**

*This question asks you what the limitations are for supplying information to a health and safety representative about the work health and safety of workers in the work group?*

**Minimum mark obtained:** 0  
**Maximum mark obtained:** 20  
**Average mark obtained:** 8

Part 3 Section 68 of the WH&S Act 2011 outlines the restrictions placed on a Health & Safety Representative.

**Question 5 - (Worth 20 marks)**

*This question asks you how an issue that an employee may have at the workplace can be resolved?*

**Minimum mark obtained:** 0  
**Maximum mark obtained:** 20  
**Average mark obtained:** 7

WH&S Act 2011, Division 5– Issue Resolution: Section 80 Parties to an Issue

**OCE2 Coal Mining Practice – Paper total 200 marks**

**Number of candidates:** 35  
**Minimum mark obtained:** 78  
**Maximum mark obtained:** 153  
**Average mark obtained:** 118

**Comments on OCE2 Paper:** Generally the standard was poor with many candidates showing a lack of practical knowledge

**Analysis of Answers to Questions:**

**Question 1 – Incident Management (Total of 50 marks)**

*This question relates to a 30m fall of a dump truck, how you would manage the incident (10 marks) describing the process to recover the truck (20 marks) and an outline of contributing factors and actions for prevention of a recurring incident (20 marks).*

**Minimum mark obtained:** 21  
**Maximum mark obtained:** 40  
**Average mark obtained:** 29

Candidates generally demonstrated competence when it came to initial emergency management of the incident. Candidates achieved good marks where details were given regarding notifications and reporting (including shift report and handover information to the oncoming OCE). A number of candidates failed to D&A test the operator or commence information gathering for the incident investigation.

Some candidates made good use of stating assumptions to make the recovery more manageable. While there are various ways in which the recovery process could follow, candidates need to keep in mind that there is no rush to recover the truck after the operator was out of the truck and a risk assessment is a fundamental requirement before any attempt of recovery. Thorough reading of the question is paramount especially in understanding the position of the truck so a realistic method of recovery could be adopted.

While contributing factors were generally well identified, candidates did not provide the full scope of controls to manage the hazards.

### **Question 2 – Contractor Management (Compulsory)** (Total of 50 Marks)

*In this question you are asked to establish and supervise a project for the MME, listing the activities, hazards and recommended controls (30 marks) and preparation of a checklist for use on a daily basis to ensure workers carry out their task safely (20 marks).*

<b>Minimum mark obtained:</b>	20
<b>Maximum mark obtained:</b>	39
<b>Average mark obtained:</b>	29

The question is very much a test of a candidate's hazard and control awareness.

When developing the risk assessment table, some candidates failed to cover all activities (Stripping and clearing, Preparation of the area for drilling, drilling and then blasting) even though the question clearly requires it. Generally, candidates did not give a lot of consideration to the control of noise, dust and blasting impacts to nearby residents.

### **Question 3 - Blast Management** (Total of 50 Marks)

*This question is regarding a cloud of blast fume heading towards a group of mine operators and asks; for your immediate actions (10 marks), what a fume is and how its formed (5 marks), the potential health affects (5 marks), how to manage a casualty exposed to blast fume (5 marks) and to tabulate the possible causes and controls required to minimise or eliminate it (25 marks).*

<b>Minimum mark obtained:</b>	18
<b>Maximum mark obtained:</b>	42
<b>Average mark obtained:</b>	28

This has been a common question in recent years and it was pleasing to see that most candidates covered the basics.

Some candidates failed to be decisive in their immediate actions and attempted to "hedge their bets" by suggesting more than one course of action. Those that committed to a single course of action, whether the best course or not, were rewarded due to their decisiveness. Candidates who chose to evacuate the crib hut need to consider the risk associated with that while keeping in mind the time available,

distance to the crib hut, probable dissipation of the cloud by the time it reached the crib hut to a lower concentration.

Part (e) held the highest weighting of marks which tested the knowledge of possible causes of blast fume and the controls required to minimise or eliminate it. Most candidates covered the basic requirements of this however some lack of scope for the controls was evident overall.

#### **Question 4 – Environment and Community (Total 50 Marks)**

*This questions asks you to name the key documents in place to protect the environment and community against the impacts of mining (10 marks), what the OCE responsibilities are to avoid an infringement notice and the specific actions you would take (30 marks), and you obligations and actions you would take to deal with n incident of mine water overflowing into a clean water draining which leads to a creek (10 marks).*

**Minimum mark obtained:** 6  
**Maximum mark obtained:** 36  
**Average mark obtained:** 20

Part (a) was answered well with most candidates recording the key requirements i.e. EPL, DA and mentioning the environmental Management Plan.

Some candidates went into detail of some of the management plans but failed to answer the question which required the basic environmental responsibilities of an OCE: Noise, dust, water, blasting etc.

Part (c) most candidates failed to mention the Pollution Response Management Plan and report the incident to the local community.

#### **Question 5 - Inspection (Compulsory) (Total of 50 Marks)**

*This question asks you as the oncoming OCE after a heavy rain event to; list the tools and information to assist with your inspection (5 marks), list the expected hazards (20 marks), to manage the overburden area which is partly flooded and has a dozer available (15 marks), to manage the oncoming production crew who have arrived and are about to take part in their pre-shift briefing (10 marks).*

**Minimum mark obtained:** 19  
**Maximum mark obtained:** 46  
**Average mark obtained:** 32

This question tested the candidate's ability to outline the practical steps involved in a start-up inspection where there was a break in shifts. The question also tested the candidate's ability to manage their time during the inspection after coming across hazards during their shift. In addition, how they would respond to running out of time during an inspection.

This question represents a fundamental function of an OCE and disappointingly was generally answered below expectations. Whilst most candidates were good at being

able to identify hazards and the communication process, many took the approach of handling the problem as an operator.

Draining water from the tip head saw only half the candidates inspecting the toe of the dump to check downstream effects of that action.

A minority of candidates opted to operate the dump dozer during their inspection to manage the hazard themselves. Any candidate who opted for this, even if they mentioned other controls that were adequate, were given a zero mark as this is not a task an OCE should be undertaking during a solo pre shift inspection.

Demarcation of the uninspected area (coal area) was missed by nearly all candidates. OCEs need to practically ensure that unauthorised entry is prevented, achievable through appropriate signage.

Nearly all candidates failed to recognise that a separate statutory report is developed by operations that have a non-continuous inspection period. This report supplements the shift inspection report. Similarly, only a few candidates identified sleeping shots at risk during periods of wet weather, as well as storage dams overflowing.

#### **Question 6 – Mining through old underground workings (Total of 50 Marks)**

*You as an experienced OCE are asked to be on a team to draft up a broad brush risk assessment to underpin a Health and Safety Management System for an open cut mine which was approved over an old underground bord and pillar mine. You are asked to: list the associated hazards (20 marks), list the controls to eliminate or control these hazards and the information sources available to assist you with your risk assessment (20 marks) and who you would recommend to be involved (10 marks).*

<b>Minimum mark obtained:</b>	0
<b>Maximum mark obtained:</b>	40
<b>Average mark obtained:</b>	31

This question tested the candidate's knowledge of the hazards presented by a mine working over underground workings. The question also tested the candidate's knowledge of available resources to them to assist in being able to make decisions in a broad brush risk assessment environment.

Generally, the responses were adequate. The major hazards were identified (Gas, Spontaneous Combustion/heat, Subsidence) with other lower priority hazards also picked up. Most candidates identified good controls for the hazards, with only a few relying too heavily on administrative controls. Many candidates failed to recognise barometric effects on gas and heat.

A couple of candidates did not demonstrate understanding of underground workings through very weak responses.

## **ORAL EXAMINATION ANALYSES**

### **Oral examinations**

**Overall comments:** The candidates who had taken the time to properly benchmark and visit other sites handled the orals generally well. The candidates who did not pass their oral generally showed a lack of practical experience in answering the questions. A lot of prompting was required.

### **Analysis of topics on which candidates were not yet competent :**

#### **-Topics examined**

- Understanding the legislative framework in NSW - Some candidates did know their own mine's systems.
- Pre-shift Inspection after Xmas break - Some candidates forgot about areas like drill and blast and did not use mobile phone to call employees in early when dangerous situations were found that could jeopardise machinery.
- Shotfiring - Some candidates did have a good understanding of shotfiring
- Incident management - Some candidates forgot about isolation of machinery and drug & alcohol testing
- Fatigue - Some candidates did not fully understand the controls which can be put in place
- Dumping over a 40m highwall - Some candidates did not fully appreciate the problems with dumping over a 40m highwall.
- Contractor Management - Some candidates did have knowledge of their own mine's contractor management system