



EXAMINATION PANEL REPORT FOR OPEN CUT MANAGERS - March 2013

APPLICATIONS

Number applied: 14
Number approved: 14

Comments: Generally the candidates struggled in both the legislation and practical written exams which is disappointing.

WRITTEN EXAMINATION

Date: 1 March 2013

Number of candidates: 14
Did Not Sit: 2
Passed: 1 (0.7% success rate)

Highest mark: 304/400
Average mark: 231

Written examination papers

OCM1 Mining Legislation

Number of candidates: 11
Minimum mark obtained: 8
Maximum mark obtained: 75
Average mark obtained: 35

Overall comments: The candidates once again struggled with open book concept for legislation. They are not using the index to find the answers.

Analysis of Questions

Question 1 – Legislative Requirements (Worth 20 Marks)

Question asked about the colliery holder of 3 operations two questions; the legislative requirements (10 marks) and what to do if the operator changed (10 marks).

Minimum mark obtained: 0
Maximum mark obtained: 15
Average mark obtained: 8

The both parts of the question were generally handled poorly with candidates not being able to refer to CI 7 (2) and 8 of the CMHS Regs. This should be easy for a Manager.

Question 2 – Highwall Mining (Worth 20 marks)

Question asked for the requirements of the OCM if they were to apply for permission to carry out further highwall mining at an end of life O/C mine (20 marks).

Minimum mark obtained: 5
Maximum mark obtained: 10
Average mark obtained: 9

Most candidates realised it was a CI 49 High Risk Activity but did not fully elaborate on the requirements and failed to make mention of the DPI Technical Reference CTR-001

Question 3 - Contractors (Worth 20 marks)

Question asks the OCM two questions; first is what to do about contract driller on part of the mine with an exploration licence (10 marks) and second is about a runaway vehicle belonging to a driller (10 marks).

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

Most candidates answered the first part okay but did not read CI 57 which clearly states this is not a Reportable Incident

Question 4 – Provisional Improvement Notice (Worth 20 marks)

Question asks the OCM what their legal requirements are when a provisional improvement notice is placed on their mine (20 marks).

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

A lot of candidates did not know what a PIN was and therefore struggled to answer the question

Question 5 - Fires (Worth 20 marks)

Question asks for the responsibilities of the OCM in relation to fires as the operator of a mine with a washery (20 marks).

Minimum mark obtained: 0
Maximum mark obtained: 20
Average mark obtained: 3

A lot of the candidates could not find CI 77 & 78 CMHS Regs which relate to fires in a reclaim tunnel on the surface of a coal mine. A lot of candidates struggle when it comes to washeries, both in the legislation and practical aspects

OCM2 Coal Mining Practice

Number of candidates:	10
Minimum mark obtained:	158
Maximum mark obtained:	220
Average mark obtained:	186

Analysis of Questions

Question 1 – Excavator Shutdown (Total of 60 marks)

Question asks the OCM to identify hazards (15 marks), other issues of consideration (10 marks) and using 10 hurdles to describe how they would manage the scenario (35 marks) of an excavator which needs to be repaired in an onsite shutdown area by contractors.

Minimum mark obtained:	31
Maximum mark obtained:	55
Average mark obtained:	46

- Candidates generally showed strong knowledge in this area – as is expected from an OCM
- All candidates were able to demonstrate knowledge of the 10 hurdles process
- Hazard identification was generally of a high standard
- Several candidates did not consider environmental impacts
- Some candidates failed to identify change management in shift structure as maintenance work was scheduled outside of normal operating hours

Question 2 – Hot and Reactive Ground (Total of 60 Marks)

Question is about a start up mine with possible reactive/hot ground and asks the OCM to describe spon com and reactive ground (10 marks) describe associated hazards (10 marks), list measures for managing it in a HSMS (25 marks) and describe implementation to system evaluation process (15 marks).

Minimum mark obtained:	21
Maximum mark obtained:	47
Average mark obtained:	37

- Generally, a marginally satisfactory level of knowledge
- Some gross misunderstanding of the mechanism of spontaneous combustion – which is crucial in determining the control measures
- Candidates generally focussed on the heat hazard alone and little to no consideration of other hazards such as gas or subsidence. Thus, controls stated often limited to hot hole blasting and no other controls
- Responses for review of control effectiveness was only just adequate

Question 3 (Compulsory) - Change Management (Total of 60 Marks)

Question asks the OCM to provide a plan for downsizing the mine described to the GM. It asks for the issues to address (15 marks), the tools or mechanisms to implement 9(15 marks) and to describe the details of the plan to the GM (30 marks).

Minimum mark obtained: 22
Maximum mark obtained: 50
Average mark obtained: 36

- Generally adequate knowledge of process although not exceptional
- Candidates exhibited rehearsed responses rather than real life practice (in particular, in reference to Industrial Relations impacts involved in workforce redundancies)
- Many candidates did not present a structured plan or have a methodical approach
- Many candidates did not present a satisfactory review process in their overall plan

Question 4 – Blast Design (Total 60 Marks)

Question asks the OCM about blast design for a new development area. Using Through Seam Blasting: draw a load sheet (15 marks), blast hole timing (15 marks) and key desired outcomes (15 marks).

Minimum mark obtained: 45
Maximum mark obtained: 45
Average mark obtained: 45

- Only one candidate attempted this question and they handled it well

Question 5 (Compulsory) – Slope Stability (Total of 60 Marks)

Question asks you as the MME to review the SSMP after a number of Highwall failures and provide the following: key requirements for the SSMP (10 marks), to implement a Highwall TARP and; who is involved (10 marks), list key trigger for the TARP (20 marks) and list escalation levels for the triggers (20 marks).

Minimum mark obtained: 16
Maximum mark obtained: 53
Average mark obtained: 33

- The question required the candidates to have a good understanding of there Slope Management plan with some practical knowledge of how a TARP system is setup.
- Overall the question was answered well with the major hazards for a S.S.M.P listed and who would be involved in implementing a TARP system at a mine.

- Key triggers and escalation levels were also answered well some candidates having a high level of understanding of the makeup of a Highwall TARP system.

Question 6 – Contractor Change Management (Total of 60 Marks)

Question asks you, as the MME of the mine described, to describe in detail and state all assumptions how you would manage a change of explosives supplier (60 marks)

Minimum mark obtained: 32
Maximum mark obtained: 45
Average mark obtained: 38

- This question requires the candidate to apply a risk based approach change as well as identifying the candidate's ability to manage considerations including; Health & safety, E&C, legislative, operational needs including resources, efficiency and cost.
- Candidates who achieved better marks demonstrated the components of the planned management cycle model – i.e. plan, do, check, review (PDCR) and considered all areas not just health & Safety. Not all candidates recognised that there were in fact 2 changes to be managed in parallel i.e. for the contractor being removed and the contractor being introduced.
- A common theme was that a number of candidates did not demonstrate a process that they would follow to manage the change but rather gave too much focus to hazards and controls.

Question 7 – Blast Fume Management (Total of 60 Marks)

Question asks you, as the MME of a mine where a local resident has been hospitalised due to a blast fume plume generated from a blast at your mine, for the following; what actions you take on notification of the incident (15 marks), describe action to prevent reoccurrence (25 marks) and develop and describe the contents of a Blast Fume Management Plan for your Operations Manager.

Minimum mark obtained: 21
Maximum mark obtained: 46
Average mark obtained: 32

- This question involves the management of blast fume at a time where fume management is very topical.
- As in Q6, candidates who achieved better marks demonstrated the components of the planned management cycle model – i.e. plan, do, check, review (PDCR) particularly relating to part (b) of the question.
- An astute candidate would also be aware that Blast Fume Management Plans have recently been requested from mine sites by DoPI which would assist in answering part (c) of the question if familiar with their operations submission or others that are relatively accessible. However, a common sense approach to describing the contents of a Blast Fume Management Plan was enough to enable candidates to cover most areas.

Question 8 – Coal Preparation & Community Impacts (Total of 60 Marks)

Question about the actions of the MME in charge of a CHPP where you are asked to: describe the process of isolation and a planned shutdown (15 marks), state the actions to take for an injury after the Surge Bin failed (10 marks) and prevention measures (15 marks), and lastly in relation to community complaints; state what infrasound is (15 marks), its effects on humans (5 marks) and the possible cause and suggested controls for reduction (10 marks).

Minimum mark obtained: -
Maximum mark obtained: -
Average mark obtained: -

- This question was not attempted by any candidate.

Oral examination

Date: 2 May 2013

Number of candidates: 5
Did not sit: 2
Passed: 0 (0 % success rate)

Overall comments:

- Candidates demonstrated adequate knowledge of the legislation
- Candidates were able to describe how the legislation applied at their sites
- Improvement required by some candidates in terms of a systematic approach to addressing situations
- Improvement required by some candidates to have more practical experience especially in terms of incident management. Some responses put employees at immediate risk and did not address the cause of the incident.

Analysis of topics on which candidates were not yet competent

Topics examined

- Legislative Framework
- Incident Management