



Trade &  
Investment  
Mine Safety

(OCE1)

## **NSW Coal Competence Board**

### **EXAMINATION FOR CERTIFICATE OF COMPETENCE AS OPEN CUT EXAMINER**

*(Coal Mine Health and Safety Act 2002)*

Thursday 15 August 2013  
9.30 am to 10.30 am

### **LEGISLATION**

#### **INSTRUCTION TO CANDIDATES**

All questions are to be attempted

Answers are to be written in this booklet **ONLY**

You may use the blank pages for additional space if required

Refer to the relevant legislative provisions when answering all questions:

*Work Health and Safety Act 2011*

*Work Health and Safety Regulation 2011*

*Coal Mine Health and Safety Act 2002*

*Coal Mine Health and Safety Regulation 2006*

*Explosives Act 2003*

*Explosives Regulation 2005*

## Questions

### Question 1

A wooden power pole in the car park falls over in high winds and strikes the side of a vehicle a glancing blow.

a) Is this reportable and explain the reason for your decision? (10 Marks)

At the same time the pole falls over, 2 cars are approaching the entry to the mine site see it occur. The first driver stops whilst the 2<sup>nd</sup> driver continues at 5kph and strikes the first driver's car causing minimal damage.

b) Is this reportable and explain the reasons for your decision? (10 Marks)

### Question 2

When must you consult with workers? (20 Marks)

### Question 3

What are Offences in relation to Inspectors? (20 Marks)

### Question 4

A Health & Safety Representative may receive information concerning the work health and safety of workers in the work group.

What limitations are placed on supplying this information? (20 Marks)

### Question 5

If an employee has an issue at the work place, how can it be resolved? (20 Marks)

**END QUESTIONS**

**END PAPER**



(OCE2)

## NSW Coal Competence Board

### EXAMINATION FOR CERTIFICATE OF COMPETENCE AS OPEN CUT EXAMINER

*(Coal Mine Health and Safety Act 2002)*

Thursday 15 August 2013  
11.30 am to 1.30 pm

### PRACTICAL OPEN CUT OPERATION

#### INSTRUCTION TO CANDIDATES

Only four (4) of the six (6) questions are to be attempted

**Questions 2 & 5 are compulsory**

All questions are of equal value however, parts of a question may vary.

Answers are to be written in this booklet **ONLY**

You may use the blank pages for additional space if required

Drawing tools may be used for sketches

Non-programmable calculators may be used

### **Q1 Incident management**

You are an OCE working night shift when you receive a call from a dump dozer operator reporting a CAT 793 rear dump truck has backed through the dump windrow and over the face of a 30m dump. The truck is reported to have come to rest on its right side in the soft alluvial dump material approximately 10m from the toe of the dump.

- a) Detail how you would manage this incident from receiving the call from the dozer operator. (10 marks)
- b) Describe the process you would use to recover the truck. State all assumptions and provide diagrams where necessary. (20 marks)
- c) Outline what you believe to be potential contributing factors to the incident and suggested actions to prevent reoccurrence of this type of incident. (20 marks)

### **Q2 Contractor Management (COMPULSORY)**

As the day shift OCE you are requested by your Manager of Mining Engineering to establish and supervise a small project involving;

- Stripping and clearing of a thickly wooded area in a pre-strip mining area
- Preparation of the area for drilling
- Drilling and then blasting of the overburden for excavation by a pre-strip hydraulic face shovel.

The area is hilly with steep slopes of up to 20% in places and is situated approximately 1.5km from nearby residents. Your Manager has allowed you to use any internal or contractor resources as you deem appropriate to complete the project.

- a) In a simple risk assessment table, list all of the activities, hazards and recommended controls for the above project. (30 marks)
- b) Prepare a working checklist that you would use on a daily basis to ensure the tasks are carried out safely by the employees and contractors. (20 marks)

### **Q3 Blast Management**

You are the OCE on dayshift where an interburden blast has been fired which has generated a large amount of fume (see photo pg15). You observe the fume cloud moving slowly towards an in pit crib hut located approximately 500m away where 20 mining operators are having crib.

- a) What are your immediate actions? (10 marks)
- b) What is blast fume and how is it formed? (5 marks)
- c) What are the potential health affects when exposed to blast fume? (5 marks)
- d) How would you manage a casualty who claims they have been exposed to blast fume? (5 marks)
- e) In a simple table, list the possible causes of blast fume and the controls required to minimise or eliminate it. (25 marks)

#### **Q4 Environment and Community**

You are an Open Cut Examiner working in an extremely sensitive mining area from an environment and community perspective.

- a) What are the key site documents which are in place to protect the environment and community from the impacts of mining? (10 marks)
- b) What are the OCE responsibilities in regard to these documents to avoid a penalty infringement notice? Specify the actions that you would take? (30 marks)
- c) During a high rainfall event on a weekend, you notice during your inspection that a mine water dam is overflowing into the nearby clean water drain which leads to an adjoining creek. What are your obligations as the OCE and what actions would you take? (10 marks)

#### **Q5 Inspection (COMPULSORY)**

You are the Open Cut Examiner for a small coal mine in NSW that produces 2 million run of mine (ROM) tonnes per annum via truck and shovel method of extraction. Coal is delivered to a ROM pad and hopper for processing at a CHPP. The mining and maintenance crews do not work weekend night shifts.

The CHPP and maintenance areas are inspected by a competent person. Your OCE inspection district includes 3 production areas and the ROM area.

No production has occurred for the entire weekend due to heavy rain which eventually cleared early Sunday evening. You are the oncoming OCE rostered on the Monday morning dayshift and you are required to conduct a thorough inspection prior to commencement of production.

- a) List the tools and information available to you to assist you in your inspection (5 marks)
- b) List the hazards that you would expect to encounter during your inspection (20 marks)
- c) During your inspection you notice that the only overburden dump area is partly flooded at the tip head. A dozer is nearby parked safely out of the way. Assuming no one is available to come in to assist you, how would you manage this situation? (15 marks)
- d) Because of the conditions and number of hazards you identified, you have not been able to inspect the coaling operation. The oncoming production crew have arrived at work as it is nearly time for the pre-start briefing. How would you manage this situation? (10 marks)

#### **Q6 Mining Through Old Underground Workings**

A new open cut mine has been approved on an existing mining lease where an underground colliery once existed. It is an old bord & pillar mine that commenced at the turn of the century and ceased in the late 90's. A risk assessment team has been assembled to draft up the first broad-brush risk assessment to underpin the site's Health & Safety Management System. You have been asked to be on the team to represent the production department as an experienced Open Cut Examiner.

- a) List the hazards specifically associated with open cut mining over and through the old underground workings (20 marks)
- b) List the controls you would use to eliminate, or control these hazards (20 marks)
- c) What information sources are available to you to assist with your risk assessment and who would you recommend should be involved? (10 marks)

**END QUESTIONS  
END PAPER**