

Quarry manager of mines other than underground mines or coal mines certificate of competence

Written examination held 5 July 2018

Instructions to candidates

Legislation to be assessed:

Work Health and Safety Act 2011

Work Health and Safety Regulation 2011

Work Health and Safety (Mines and Petroleum Sites) Act 2013

Work Health and Safety (Mines and Petroleum Sites) Regulation 2014

Explosives Act 2003

Explosives Regulation 2013

Explosives Australian Standard AS 2187

Part A – Legislation knowledge

All questions are to be attempted

Candidates must provide reference to all relevant legislation & standards in their answers

Refer to the relevant legislative provisions when answering all questions

Question 1 - Regulatory response to an Incident

A front-end loader working on the side of a tailings dam wall has overturned at an operation where you are the Quarry Manager.

Discuss:

- The reporting required for such an incident. (4 marks)
- What you are required to do with regards to statutory inspection? (4marks)
- What are the powers of an Inspector with regards to investigating the incident? (2marks)

Question 2 - Working at height / Falls from mobile equipment

As Quarry Manager you are responsible for the management of risk, including that of falling from mobile equipment at your workplace.

- List & explain the control measures that must be implemented to protect employees from the hazards of working at height on mobile equipment. (5 marks)

- b) When checking, designing or inducting mobile equipment onto site, list & briefly explain five (5) safety devices you would look for, which if not available, could result in fall injuries. (5 marks)

Question 3 - Safe use of explosives

You have recently installed explosive magazines on a mine site and have ensured that they comply with all relevant areas of legislation. Construction is complete and the magazines are in use.

As Quarry Manager, what requirements do you now implement and maintain to ensure the continued safe use of these explosive facilities? (10 marks)

Question 4 - Management of mobile equipment fires

Fires on mobile plant have the potential to cause major damage and harm people.

- a) Describe how you would go about assessing the risk of mobile equipment fires. (5 marks)
- b) Discuss how your Safe Work Method Statement would deal with minimising risk in these areas. (5 marks)

Question 5 - Mine safety management system

Work directly related to mining cannot be carried out before the operator of the mine establishes a Mine Safety System, stating how the health & safety of the persons who work at the mine, or are directly affected by the mine, will be protected.

Describe how you, as Quarry Manager, would go about establishing and implementing the Mine Safety Management System? (10 marks)

Question 6 - Fatigue management

Clause 9 of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 sets out the requirements for a person conducting a business or undertaking to manage risks to health and safety.

As the Quarry Manager,

- a) Explain how you would manage risks with regard to fatigue at your workplace. (5 marks)
- b) Give examples of how you would raise the situational awareness of fatigue in the workplace. (5 marks)

Question 7 - Drug and alcohol management

In your answer to the following, use your own words to:

- a) Describe the duties of a PCBU/Mine operator to provide an effective Drug and Alcohol Control Plan (a prescribed component of the Health Control Plan). (5 marks)
- b) Give examples of drug and alcohol controls you, as the Quarry Manager, would consider for your mine. (5marks)

Part B – Legislation knowledge and application

Instructions as per Part A

Question 8 - Hierarchy of control / Risk management

Continued inspection and maintenance of conveyor belt rollers is critical to safe operation of a crushing plant.

- a) List in the table provided the potential hazards that could exist when working on this type of maintenance activity. (5 marks)
- b) Give examples in this table of how you would use the Hierarchy of Control Measures to deal with each of these risks. (10 marks)

Question 9 - New open cut in side of hill

You have been appointed Quarry Manager at a new open cut in the side of a steep hill (*50-degree average slope*). All necessary approvals have been granted and you are required to establish and commence workings.

Explain how you would go about this and what you consider would be the critical safety issues that you would need to address.

In your answer make particular reference to the pit layout, equipment selection and the legislation and standards which apply. (15 marks)

More information

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Resources Regulator

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Acknowledgments

Quarry Manager examination panel

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