

Mining engineering manager of coal mines other than underground coal mines

OCM1 – Legislation

Candidate no.: _____

Legislation to be assessed

Unless otherwise stated all references to Act and Regulations are to:

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2017
- Work Health and Safety (Mines and Petroleum Sites) Act 2013
- Work Health and Safety (Mines and Petroleum Sites) Regulation 2022
- Explosives Act 2003
- Explosives Regulation 2024

Exam details

Region: New South Wales Venue: Tocal College Room: Mcfarlane Court Start date/time: Thursday 19 June 2025 9:00am End date/time: Thursday 19 June 2025 10:10am Duration: 01:10

Instructions to candidates

- · Answers are to be written in the allocated spaces within this booklet ONLY
- Answers must be written in pen however, drawings may be completed in pencil
- This booklet is not to be altered in any way, pages are not to be added or removed
- Additional space is provided at the end of the paper. Please label which question the answer relates to.
- You must obtain a total of 66 marks to pass this paper

Marking Sheet

Q #	Marks	Available Marks	Marked by	Summary comments to justify
			initials	
1		10		
2		20		
3		20		
4		20		
5		30		
6		10		
Paper Total		110		Marks checked by

Work Health and Safety (Mines and Petroleum Sites) Act 2013 No 54 (10 Marks)

Summarise the key requirements in Section 29 - Functions of industry safety and health representatives.



Work Health and Safety (Mines and Petroleum Sites) Regulation 2022. (20 Marks)

Subdivision 1 Operational Controls

35 Notification of high risk activities

Summarise the key requirements.

Work Health and Safety Act 2011 No 10 (20 Marks)

Summarise the key requirements.

19 Primary duty of care

Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 (20 Marks)

Summarise the key requirements

14 Management of risks to health and safety

Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 (30 Marks)

Summarise the key requirements

19 Content of safety management system (Coal mines other than underground coal mines)



Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 (10 Marks)

Summarise the key requirements.

91 Duty to prepare emergency plan

End of Document



Mining engineering manager of coal mines other than underground coal mines

OCM2 - Open cut mining practice

Candidate no.: _____

Legislation to be assessed

Unless otherwise stated all references to Act and Regulations are to:

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2017
- Work Health and Safety (Mines and Petroleum Sites) Act 2013
- Work Health and Safety (Mines and Petroleum Sites) Regulation 2022
- Explosives Act 2003
- Explosives Regulation 2024

Exam details

Region: New South Wales Venue: Tocal College Room: Mcfarlane Court Start date/time: Thursday 19 June 2025 11:00am End date/time: Thursday 19 June 2025 2:10pm Duration: 03:10

Instructions to candidates

- · Answers are to be written in the allocated spaces within this booklet ONLY
- Answers must be written in pen however, drawings may be completed in pencil
- This booklet is not to be altered in any way, pages are not to be added or removed
- Additional space is provided at the end of the paper. Please label which question the answer relates to.
- You must obtain a total of 180 marks to pass this paper

Marking Sheet

Question Number		Mark	Available mark	Marked by Name	Summary comments to justify, as necessary
1	А		20		
	В		10		
	С		20		
	Subtotal		50		
2	А		10		
	Bi		10		
	B ii		10		
	B iii		10		
	B iv		5		
	Вv		5		
	Subtotal		50		
3	А		10		
	В		10		
	С		10		
	D		10		
	E		10		
	Subtotal		50		
4	А		12		

Candidate no.: _____

Question Number		Mark	Available mark	Marked by Name	Summary comments to justify, as necessary
	В		12		
	С		12		
	D		5		
	E		5		
	F		4		
	Subtotal		50		
5	А		15		
	В		10		
	С		15		
	D		10		
	Subtotal		50		
6	А		20		
	В		10		
	С		10		
	D		10		
	Subtotal		50		
PAPER	TOTAL		300		Marks checked by:

You have just accepted a role as Mining Engineering Manager at a small Open Cut mine that produces approximately 2.5 million tonnes of saleable thermal coal per annum.

The incumbent MEM that you have been engaged to replace holds the Licence to store explosives and you are required to be the licence holder.

A. Describe what is required for you to apply to become the licence holder. (20 Marks)



B. During an audit of the magazine facilities, you discovered that some of the products are out-of-date. Which consists of approximately 120 units of 1.1D class explosives precursors. **(10 Marks)**

i. List examples of explosive precursors that are classed as 1.1D

ii. List examples of explosive precursors that are classed as 1.1B

C. Describe how you would manage the out-of-date products in a safe and cost-effective manner. **(20 Marks)**

i. What other options you would have to dispose of the explosive.

i. What is required to prevent this from occurring again.

You are the Mining Engineering Manager of a large mine site which uses a fleet of hydraulic excavators and electric drive haul trucks producing 10 million tonnes of coal per year. The mine plan is to mine an area of the current lease which increases significantly in strip ratio from 4:1 to approximately 8:1. The General Manager has tasked you with a project to implement a 4100XPC electric shovel to mine this area to achieve the mine plan.

A. Outline how you would plan this task and the process you would follow to achieve the project scope. **(10 marks)**

B. Summarise the following.

i. Who will you involve and what purpose or function will they perform in the implementation of the shovel? (Internal/External stakeholders) **(10 marks)**

ii. The hazards associated with the implementation and operation of the electric shovel. **(10 marks)**

iii. The controls required to manage the hazards (health and safety, productivity, efficiency, and costs). (10 marks)

iv. Describe the verification activities and processes that are required to confirm the safe introduction of the shovel. **(5 marks)**

v. What controls or processes are required to verify the effectiveness of the introduction of the shovel? **(5 marks)**

You are the Mining Engineering Manager at a large open cut mine which operates a fleet of excavators and haul trucks and auxiliary equipment. The site produces approximately 10 million of coal per annum which is hauled to the coal handling preparation plant for washing and tailings from the plant is pumped to a tailing's storage dam in the mining area. An increase in the production forecast for the mine has identified that the tailings storage facility does not have enough capacity to achieve the life of mine plan. The mine general manager has tasked you to manage a project to raise the tailings dam wall by six metres around the perimeter of the existing tailings dam.

A. Outline how you would plan this task and the process you would follow to achieve the project scope. **(10 Marks)**

Summarise the following.

B. What are the legislative requirements and approvals required before commencing this project? **(10 Marks)**

C. Who will you involve and what purpose or function will they perform to achieve this project? **(10 Marks)**

D. The hazards associated in performing the work to comply with the design and construction of the dam wall. **(10 Marks)**

E. The controls required to manage the risk (health and safety, productivity, efficiency, and costs). **(10 Marks)**

As a Mining Engineering Manager, you have continued to receive a number of complaints from your operators about other workers and the overall efficiency and culture of the mine. Your safety and training manager has suggested that you need to implement a psychosocial standard onsite so as to ensure that all workers are aware of their duties and have a complete understanding of Psychosocial Hazards in the workplace. You decided to embark on implementing this process.

A. What is a Psychosocial hazard? (12 Marks)

B. List the steps of how you intend to implement this in the workplace. (12 Marks)

C. List six (6) examples on **what/how** Psychosocial hazard can include in the workplace? **(12 Marks)**

D. Who is responsible for psychosocial hazards? (5 Marks)

E. As a Mine Manager, what is your responsibility to ensure that your mine site is compliant with managing these hazards? **(5 Marks)**

F. What is the hierarchy of control for Psychosocial Hazards? (4 Marks)

You are the Mining Engineering Manager and received a call at shift change on Sunday afternoon from the night shift OCE that a haul truck has reversed through the tip head windrow and is resting at the base of the dump 20 metres below. The operator of the haul truck can be contacted by two-way radio and is stating that they are unable to move. Access to the area is restricted due to the dump being tipped over block tip.

A. List in sequence initial actions you would undertake as MEM in response to the incident. **(15 Marks)**

B. You are required to engage external services to assist in recovering and managing the injured person. How would you manage the incident in an effective sequence? **(10 Marks)**

C. As the site Mining engineering manager (MEM), summarise all the immediate and foreseeable legislative requirements that are required to be complied with in relation to this incident. **(15 Marks)**

D. Describe the immediate actions you would take to rectify the causes of the incident and to minimise re-occurrence to enable work to continue. **(10 Marks)**

You are a Mining Engineering Manager at an Open Cut Mine that has finished mining and is in the process of closure. Planning for the rehabilitation of the land and the demolition of previous key infrastructure is well underway. The demolition its CHPP and surrounding buildings is deemed to be demolished. You have engaged a principal contractor after a thorough tender process for the demolition project. It has been established that the contractor will be utilising Excavators with demolition attachments as well as cranes and other ancillary equipment. It is envisaged that their people will be working at heights throughout the project to assist in the demolition. All waste material is to be cut up and removed from site using on-road trucks.

A. In relation to the safety aspects of the demolition project, list the overall considerations that will need to be taken into account before any demolition work being conducted. **(20 Marks)**



B. Please list the five (5) common systematic steps that are generally used in risk identification. **(10 Marks)**

C. Under the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022), there are requirements to be performed by the Mine Operator for the management of contractors and workers at the mine site. This would also be used for the Demolition process so as to be in compliance with this legislation. These requirements are described in Part 3 Managing Risk - Sections 14, 24, 25, 106, 107, 108, 115

Name these Sections. (10 Marks)

D. Under the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022), Part 3 Managing Risk - Sections 14, 24, 25. Describe in detail each of the sections. **(10 Marks)**



End of Document