

New South Wales

Board of Surveying and Spatial Information

MINING LAW ASSESSMENT

MINING SURVEYING

Surveying and Spatial Information Act 2002

(Mining Legislation)

Wednesday 4th March 2015

All questions to be answered

Duration 2 Hours

Pass Mark of 60% Required

1. As stated in AS4368 what is the conventional colour to be used for **return air**?
2. Sketch the symbol for each of the features described below, as defined in AS4368 Mine Plans – Preparation and Symbols.
 - a. Winch
 - b. Circular Shaft Bottom
 - c. Fire Depot
 - d. Trig Station Pillar
3. As stated in the Coal Mine Health and Safety Act 2002 who must ensure that mining at a coal mine is carried out in compliance with the Health and Safety management system?
4. In addition to the regular review, describe 3 occasions when an operator must immediately review the Health and Safety Management System, as defined in the Coal Mine Health and Safety Act 2002.
5. Define **registered mining surveyor** as described in the Coal Mine Health and Safety Regulation 2006?
6. What are 2 occasions an operator must review the escape and rescue plan as described in the Coal Mine Health and Safety Regulation 2006?
7. What 3 things must an operator ensure that when assessing risks associated with Inrush are taken into consideration as described in the Coal Mine Health and Safety Regulation 2006?
8. Define **abandoned mine** as described in the Mine Health & Safety Act 2004?
9. What are the 3 things a mine safety management plan must provide, as described in the Mine Health & Safety Act 2004?
10. Define a **formal survey plan** as described in the Surveying and Spatial Information Act 2002?
11. What actions may the Board take against a registered surveyor who demonstrates incompetence in carrying out a survey as described in the Surveying and Spatial Information Act 2002?
12. Define **mining survey** as described in the Surveying and Spatial Information Act 2002?
13. In relation to a mining survey undertaken by a registered mining surveyor, what does **survey regulator** mean, as described in the Surveying and Spatial Information Act 2002?

14. Define **reference station** as described in the Surveying and Spatial Information Regulation 2012?
15. Define **established survey mark** as described in the Surveying and Spatial Information Regulation 2012?
16. Define the **MGA** as described in the Surveying and Spatial Information Regulation 2012?
17. In accordance with Surveyor General's Direction 1 describe a Type 2 permanent mark?
18. In accordance with Surveyor General's Direction 11 name four items to be addressed where permanent marks are to be disturbed by mining activities?
19. What is a **Level 2 Mine** as described in ESG3?
20. List 4 items to be addressed on Plan 1B-Pre mining environment-Natural Environment in a Mining Operations Plan under the ESG3 Guideline for a Level 1 mine.
21. List 4 items to be addressed on Plan 4 – Final Rehabilitation and Post Mining Land Use in a Mining Operations Plan under the ESG3 Guideline for a Level 1 mine.
22. List 4 core attributes as specified for either a coal or metalliferous mine spatial submission.
23. List 2 metadata attributes as specified for either a coal or metalliferous mine spatial submission.
24. Describe the liability of a Nominated Mining Surveyor as stated in the Survey and Drafting Directions for Mining Surveyors 2008, Amendments 2014?
25. Define **Certification** in accordance with the Survey and Drafting Directions for Mining Surveyors 2008, Amendments 2014?
26. What are five types of surveys that records must be kept for at a survey office of a mine as described in Survey and Drafting Directions for Mining Surveyors 2008, Amendments 2014?
27. What are the 3 categories that theme attributes are divided into as described in Survey and Drafting Directions for Mining Surveyors 2008, Amendments 2014?
28. Define **care and maintenance** in accordance with the Survey and Drafting Directions for Mine Surveyors 2013, Amendments 2014?

29. Define ***seam working sheet*** in accordance with the Survey and Drafting Directions for Mine Surveyors 2013, Amendments 2014?
30. Define ***secondary survey*** in accordance with the Survey and Drafting Directions for Mine Surveyors 2013, Amendments 2014?
31. Name 4 other plans required for an underground mine in accordance with the Survey and Drafting Directions for Mine Surveyors 2013, Amendments 2014

Question 2A (5Marks)

You have been engaged as a consultant by the operator of a bord and pillar coal mine to prepare an Archival Research Report for some suspected underground coal and shale mines within the current mining lease, for consideration as part of a Risk Assessment for Inrush.

Detail what sources of information you would access and how you would verify it?

Question 2B (5Marks)

With reference to the Mine Health & Safety Regulation 2007, who is responsible to ensure that the mine plan is updated and how often must it be updated?

Who must certify a mine plan at a mine with greater than 20 employees and what is that person certifying?

Question 3 (10 Marks)

You are the Nominated Mining Surveyor for a longwall coal mine.

You are planning to carry out a primary control traverse of a three (3) kilometre gate road from the Mains to the production face, however the installation road has not yet been formed up.

The mine is known to be susceptible from lateral movement from the adjacent longwall goaf.

With reference to ICSM SP1 (version 1.7), detail what considerations you would have in planning and carrying out the survey to achieve Class D or better?

Question 4 (10 Marks)

Your mine has a lease for a down cast shaft that is at a remote location.

The lease does include an access road.

Detail your legal right to access this shaft and any survey requirements that may be required under the Mining Act and Regulation?

Question 5 (10 Marks)

You are the Nominated Mine Surveyor at an open cut coal mine.

Describe the process and applications involved to allow company to mine the barrier between the open cut and some disused underground workings previously operated by your company at the site?

Question 6 (10 Marks)

You are the Nominated Mine Surveyor at a new underground metalliferous mine.

The surveyors under your control include workers directly employed by the company and some workers engaged through a contracting company.

You have noticed increasing tension and animosity among the surveyors and are concerned that a degree of work place harassment may be taking place.

Detail what actions you would take to resolve this situation ensuring compliance with the provisions of the Work Health and Safety Act and Regulation?