



**BOARD OF SURVEYING AND SPATIAL INFORMATION**  
**Rules for the Conduct of Examinations**  
**For Certificate of Competency as Mining Surveyor**

These rules shall apply from 1<sup>st</sup> November 2004 to candidates seeking to qualify for a Certificate of Competency as a Mining Surveyor.

**PART A**

**1.0 AGE REQUIREMENT**

The minimum age at which a person will be issued with a certificate is 21. A person may sit for the examination before attaining this age.

**2.0 EXAMINATIONS**

Examinations shall be held twice a year, dates will be advertised.

**3.0 Surveys and Plans Project**

Prior to making application for the examination a candidate must have conducted surveys and prepared plans for submission to the Board of Surveying and Spatial Information. These surveys and plans must be in accordance with either the Coal Mines Regulation Act (1982) and Regulations or the Mines Inspection Act 1901 and General Rule 2000. A Mine Workings Plan shall be produced by the candidate derived from surveys and calculations undertaken by the candidate. The Mine Workings Plan for any surface mine or an underground coal mine shall be of mine workings having an area greater than 7.5 Ha. The Mine Workings Plan for an underground mine as defined in the Mines Inspection Act 1901 shall be of mine workings having an area greater than 7.5 Ha or equivalent. The equivalent area provision shall be ratified by the Board of Surveying and Spatial Information upon individual application prior to the presentation of the Surveys and Plans Project. The full area of the Mine Workings Plan shall show all control and secondary surveys used in the preparation of the plan.

A primary control traverse used in the preparation of the Mine Workings Plan must contain a minimum of five survey legs. The primary control traverse must demonstrate traversing skills that are common to both surface and underground traversing techniques and requirements. The Mine Workings Plan is to show the candidates own work only. If necessary for the purpose of survey definition, survey work by other surveyors may be shown but must be clearly identified and endorsed on the plan.

The Mine Workings Plan shall be presented in both Digital form and Hard Copy form as defined in the Survey and Drafting Directions for Mining Surveyors and the Survey and Drafting Directions for Mine Surveyors.

A longitudinal section is to be prepared derived from a survey and calculations undertaken by the candidate. This longitudinal section is to have a minimum length of 200 metres. The section is to indicate the floor and roof of mine workings or haul road or pad design for a surface project. The section should show grading for a mining engineering purpose with cuts and fills necessary to achieve finished grades.

### **3.1 Survey Report**

A full report on the surveys effected to fulfil the requirements of the application is to be submitted. The report is to include all field notes, calculations and reductions associated with the surveys. Electronic field notes and observations must be supported with documentation indicating the underlying electronic process and procedures used in the verification of the observations. Documentation of the instrument accuracy testing of all survey instruments used in the preparation of the Surveys and Plans Project is to be included.

### **3.2 Orientation Review**

The orientation review comprises a review of all components of the application including Surveys and Plans Project and resume of experience. Attendance at the orientation review interview is compulsory.

Candidates will be notified of the date of the review.

## **4.0 ASSESSMENT**

The elements of the assessment include:

- a) Surveys and Plans Project
- b) SB2 Mining Law (written assessment, minimum 2 hours)
- c) SC1 Oral Assessment

## **5.0 SCOPE OF WRITTEN EXAMINATION**

### **Mining Law**

The candidate will be required to demonstrate a first hand knowledge of the following:

Survey and Drafting Directions for Mine Surveyors.  
Survey and Drafting Directions for Mining Surveyors  
Relevant Acts and Regulations for applications for Leases and Licenses.  
Relevant Acts and Regulations and other relevant documentation as it applies to the mining surveyor.

## **6.0 SCOPE OF ORAL ASSESSMENT**

### **Assessment SC1 Oral Assessment**

The Oral assessment will be conducted in respect of all aspects of surveying in an Open Cut Surface mines and Underground mines. Additionally the candidate will be required to discuss the surveys and methods associated with the Surveys and Plans Project submitted with the application.

## **7.0 ASSESSMENT GUIDELINES**

A candidate cannot proceed to the Mining Law assessment until all requirements of the application have been satisfied, including the Surveys and Plans Project. A candidate will only be invited to attempt the Oral assessment upon successful completion of the Mining Law assessment.

Candidates must apply for assessment in both SB2 and SC1 at the same examination period unless the application is for a reassessment of SC1 (Oral Assessment) in accordance with section 8.3 of these rules.

### **7.1 Surveys and Plans Project**

To qualify for a competent assessment a candidate must present a Surveys and Plans Project which is assessed by the examination panel to fully comply with all aspects of legislation, Survey and Drafting Directions and any other guidelines. Following this assessment the project will be returned to the candidate for safe keeping. A review of the Survey and Plans Project may be included as part of the Oral Assessment SC1.

### **7.2 Assessment SB2 Mining Law (Written assessment)**

To qualify for a competent assessment a candidate must obtain 60% of the marks allocated for the SB2 assessment.

### **7.3 Assessment SC1 (Oral Assessment)**

To pass the oral assessment a candidate must be assessed by the examiners as being "competent". A candidate who is not assessed as competent will be required to make reapplication for assessment at each successive examination period. Under special circumstances the Board of Surveying and Spatial

Information may grant an exemption from this requirement for a period of one assessment period.

A reapplication for assessment SC1 is to be made on the appropriate form and be accompanied by the examination fee applicable. The application is to fully satisfy the requirements of section 3 and section 4 of these Rules.

Assessment SC1 will be held at a time, date and venue as advised.

Candidates must present their Surveys and Plan Project for review as part of the Oral Assessment.

## **8.0 LIMITED CERTIFICATE OF COMPETENCY AS A SURVEYOR (OPENCUT OR UNDERGROUND)**

The assessment panel may under special circumstances assess a candidate as competent in only Open Cut Mining Surveying or competent in only Underground Mining Surveying.

In these circumstances a Certificate of Competency in Surveying Open Cut Only or Underground Surveying Only will be issued.

## **PART B**

### **UPGRADING OF LIMITED CERTIFICATE OF COMPETENCY AS A MINE SURVEYOR**

#### **9.0 STATEMENT OF ADDITIONAL EXPERIENCE**

A full and detailed resume shall be prepared and submitted listing additional experience since the issue of the Limited Certificate of Competency. The accuracy of this resume is to be attested by the Mine Surveyor at each mine. This statement of additional experience is to be submitted with the application.

#### **10.0 ORIENTATION REVIEW**

The orientation review comprises a review of all components of the application including the Survey and Plans Project (if applicable) and resume of additional experience. Attendance at the orientation review interview is compulsory.

Candidates will be notified of the date of the review.

## **11.0 ASSESSMENT**

The elements of the assessment include:

- a) Surveys and Plans Project
- b) SB2 Mining Law (written assessment, minimum 2 hours)
- c) SC1 Oral Assessment

## **12.0 SCOPE OF WRITTEN EXAMINATION**

### **Assessment SB2 Mining Law**

The candidate will be required to demonstrate a first hand knowledge of the following:

Survey and Drafting directions for Mine Surveyors.

Survey and Drafting Directions for Mining Surveyors

Relevant Acts and Regulations associated with applications for Leases and Licenses.

Relevant Acts and Regulations and other relevant documentation as it applies to the mining surveyor.

An exemption to the SB2 Mining Law component of the assessment will be available if the application for upgrading is less than 3 years from the issue of the Limited Certificate of Competency.

## **13.0 SCOPE OF ORAL ASSESSMENT**

### **Assessment SC1 Oral Assessment**

The Oral assessment will be conducted in respect of all aspects of surveying in an Open Cut Surface and Underground Mines. Additionally the candidate will be required to discuss the surveys and methods associated with the Surveys and Plans Project submitted with the application.

## **14.0 ASSESSMENT GUIDELINES**

A candidate cannot proceed to Assessment SB2 until all requirements of the application have been satisfied, including the Survey and Plans Project. A candidate will only be invited to attempt assessment SC1 upon successful completion of assessment SB2.

Candidates must apply for assessment in both SB2 and SC1 at the same examination period unless the application is for a reassessment of SC1 (Oral Assessment).

## **14.1 SURVEYS AND PLANS PROJECT**

An exemption to the Surveys and Plans Project of the examination will be available if the application is less than 3 years from the issue of the Limited Certificate of Competency.

If an exemption is not applicable then section 3.0 (Surveys and Plans Project) and 3.1 (Survey Report) applies to the application. The Surveys and Plans Project and Survey Report is to be completed in the discipline of mining which the present application is for.

Following this assessment the project will be returned to the candidate for safe keeping. A review of the Survey and Plans Project may be included as part of the Oral Assessment SC1.

To qualify for a competent assessment a candidate must present a Surveys and Plans Project (in the discipline of mining which the present application is for) which is assessed by the examination panel to fully comply with all aspects of legislation, Survey and Drafting Directions and any other guidelines.

### **14.2 Assessment SB2 Mining Law (Written assessment)**

To qualify for a competent assessment a candidate must obtain 60% of the marks allocated for the SB2 assessment.

### **14.3 Assessment SC1 (Oral Assessment)**

To pass the oral assessment a candidate must be assessed by the examiners as being "competent". A candidate who is not assessed as competent will be required to make application for reassessment at successive examination period. Under special circumstances the examination panel may grant an exemption from this requirement for a period of one examination period.

A reapplication for assessment SC1 is to be made on the appropriate form and be accompanied by the examination fee applicable. The application is to fully satisfy all requirements of these Rules.

Assessment SC1 will be held at a time, date and venue as advised.

Candidates must present their Surveys and Plan Project for review as part of the Oral Assessment.