

This paper will deal with the interpretation and application of mining and engineering principles together with relevant aspects of mining legislation. You will be expected to have knowledge of safe working procedures and the causes and prevention of mine incidents.

13.8. Electrical engineer of coal mines other than underground mines

13.8.1. Prerequisites

A Stage 1 – application for examination must be accompanied by evidence that you have the following:

PREREQUISITE	REQUIREMENT
Tertiary qualification	<p>Any one of the following:</p> <ul style="list-style-type: none"> ■ Bachelor of Engineering (Electrical Engineering) issued by an Australian university, or ■ UEE62320 Advanced Diploma of Electrical Engineering – Coal Mining issued by a registered training organisation (the superseded unit number UEE62311 Advanced Diploma of Electrical Engineering – Coal Mining or other equivalent superseded unit number, is acceptable), or ■ UEE62220 Advanced Diploma of Electrical Engineering issued by a registered training organisation (the superseded unit number UEE62211 Advanced Diploma of Electrical Engineering or other equivalent superseded unit, is acceptable).
Practical experience (refer to appendix B for guidance)	<p>A minimum of four years* practical coal mine other than underground experience, including:</p> <ul style="list-style-type: none"> ■ a minimum two years involved in the installation, commissioning, maintenance and repair of electrical plant and installations (this must be included in the four years of experience above), and <ul style="list-style-type: none"> □ within that two years' experience, one year must involve electrical plant and installations: <ul style="list-style-type: none"> ▪ with a minimum 6 months at an extraction face during production or development works and ▪ during or other mining activities

PREREQUISITE	REQUIREMENT
	<ul style="list-style-type: none"> a minimum one year in a supervisory role responsible for electrical plant and installations at a coal mine other than underground <p>*In the four years of experience, up to one year in any other class of mine and one year working as an electrical engineer in another industry may be included.</p>
Identity verification	Refer to section 11 of the guide for certificate of competence.
Emergency preparedness qualification	RIIERR601E Establish and maintain mine emergency preparedness and response systems, issued by a registered training organisation (the superseded units RIIERR601D and RIIERR601A Establish and maintain mine emergency preparedness and response systems, or other equivalent superseded unit number is acceptable).

13.8.2. Written examination details

The written examination consists of the following paper:

PAPER	METHOD OF EXAMINATION	DURATION OF PAPER
CEE3 – Legislation, Australian Standards and electrical engineering applicable to open-cut mining	Closed book	3 hours

CEE3 – Legislation, Australian Standards and electrical engineering applicable to open-cut mining

This paper will deal with the interpretation and application of mining and engineering principles and Australian Standards together with relevant aspects of mining legislation. You will be expected to have knowledge of safe working procedures and the causes and prevention of mine incidents.

- knowledge of safe working procedures and the causes and prevention of mine incidents.
- identification and management of electrical hazards for different mining operations

- maintenance and operation of electrical plant and structures regularly used at that type of mine, including explosion protected plant.

You will be required to demonstrate a working knowledge of the *Work Health and Safety Act 2011*, *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, and their supporting Regulations, as they relate to the duties of an electrical engineer of coal mines other than underground coal mines. You will also be required to:

- understand the implications and management of gazettal notices related to the electrical engineering aspects of coal mines.
- know all the legislative requirements for the role, and the specific requirements for the Electrical Engineering Control Plan for that type of mine
- demonstrate a working knowledge on key Australia Standards applicable to coal mining.

13.9. Mechanical engineer of coal mines other than underground mines

13.9.1. Prerequisites

A Stage 1 – application for examination must be accompanied by evidence that you have the following:

PREREQUISITE	REQUIREMENT
Tertiary qualification	<p>Any one of the following:</p> <ul style="list-style-type: none"> • Bachelor of Engineering (Mechanical Engineering) issued by an Australian university, or • Bachelor of Engineering issued by an Australian university in the following areas of practice (or equivalent): <ul style="list-style-type: none"> ▣ Mechatronics ▣ Manufacturing ▣ Maintenance ▣ Aeronautical ▣ Avionics ▣ Refrigeration ▣ Automotive <p>and, eligible to be registered as an Engineer in the Engineering Australia Mechanical college by Engineers Australia.</p> <ul style="list-style-type: none"> ■ MEM60112 Advanced Diploma of Engineering (Mechanical) issued by a registered training organisation (an equivalent qualification issued with a superseded course number is acceptable), or ■ Associate Diploma of Engineering (Mechanical Engineering) issued by a registered training organisation (an equivalent qualification issued with a superseded course number is acceptable).

PREREQUISITE	REQUIREMENT
<p>Practical experience (refer to appendix B for guidance)</p>	<p>A minimum four years* practical coal mine other than underground experience, including:</p> <ul style="list-style-type: none"> ■ a minimum two continuous years involved in the installation, commissioning, maintenance and repair of mechanical plant (this must be included in the four years of experience above), and <ul style="list-style-type: none"> □ within that two years’ experience, one year must involve mechanical plant: <ul style="list-style-type: none"> ▪ for a minimum of 6 months at an extraction face during production or development works and ▪ during other mining activities ■ a minimum one year in a supervisory role responsible for the control and management of mechanical plant at a coal mine other than underground <p>*In the four years of experience, up to one year in any other class of mine and one year working as a mechanical engineer in another industry may be included.</p>
<p>Identity verification</p>	<p>Refer to section 11 of the guide for certificate of competence.</p>
<p>Emergency preparedness qualification</p>	<p>RIIERR601E Establish and maintain mine emergency preparedness and response systems, issued by a registered training organisation (the superseded units RIIERR601D and RIIERR601A Establish and maintain mine emergency preparedness and response systems, or other equivalent superseded unit number is acceptable).</p>

13.9.2. Written examination details

The written examination consists of the following papers:

PAPER	METHOD OF EXAMINATION	DURATION OF PAPER
CME3 – Safety and mining legislation for open-cut mines	Closed book	2.5 hours

CME3 – Safety and mining legislation for open-cut mines

This paper will deal with the interpretation and application of mining and engineering principles and Australian Standards together with relevant aspects of mining legislation. You will be expected to have a working knowledge of:

- safe working procedures and the causes and prevention of mine incidents
- identification and management of mechanical hazards for different mining operations
- maintenance and operation of mechanical plant and structures regularly used at that type of mine

You will be required to demonstrate a working knowledge of the *Work Health and Safety Act 2011*, *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, and their supporting Regulations, as they relate to the duties of a mechanical engineer of coal mines other than underground coal mines. You will also be required to:

- understand the implications and management of gazettal notices related to the mechanical engineering aspects of coal mines.
- know all the legislative requirements for the role, and the specific requirements for the Mechanical Engineering Control Plan for that type of mine
- demonstrate a working knowledge on key Australia Standards applicable to coal mining.

13.10. Mining engineering manager of underground mines other than coal mines

13.10.1. Prerequisites

A Stage 1 – application for examination must be accompanied by evidence that you have the following:

PREREQUISITE	REQUIREMENT
Tertiary qualification	<p>Any one of the following:</p> <ul style="list-style-type: none"> ■ Bachelor of Mining Engineering issued by an Australian university, or ■ RII60120 Advanced Diploma of Metalliferous Mining issued by a registered training organisation (the superseded qualifications RII60115 & RII60113 Advanced Diploma of Metalliferous Mining, or other equivalent superseded qualification is acceptable).
Practical experience (refer to appendix B for guidance)	<p>A minimum of five years* practical underground mine experience (other than coal), including:</p> <ul style="list-style-type: none"> ■ a minimum three years being present: <ul style="list-style-type: none"> □ with a minimum 1 year at an extraction face during production or development works and □ during other mining activities <p>(this must be included in the five years of experience required above)</p> ■ a minimum two years in a supervisory role responsible for the control and management of underground mining operations (other than coal), with minimum 1 year in mining activities at the mine. <p>*In the five years of experience, up to one year in any other class of mine may be included.</p>

PREREQUISITE	REQUIREMENT
Identity verification	Refer to section 11 of the guide for certificate of competence.
Emergency preparedness qualification	RIIERR601E Establish and maintain mine emergency preparedness and response systems, issued by a registered training organisation (the superseded units RIIERR601D and RIIERR601A Establish and maintain mine emergency preparedness and response systems, or other equivalent superseded unit number is acceptable).
Blasting experience	Blasting experience is no longer a pre-requisite. Applicants should refer to <i>Further specific guidance for certificates</i> section of Appendix B

13.10.2. Written examination details

The written examination consists of the following papers:

PAPER	METHOD OF EXAMINATION	DURATION OF PAPER
Paper A – Legislation knowledge	Closed book	1 hour
Paper B – Legislation knowledge and application	Closed book	2 hours

Paper A – Legislation knowledge

You will be required to demonstrate a working knowledge of the *Work Health and Safety Act 2011*, *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, *Explosives Act 2003* and their supporting regulations, and the latest version of Australian Standard 2187 Explosives – Storage, Transport and Use, as they relate to the duties of a mining engineering manager.

Paper B – Legislation knowledge and application

You will be required to interpret and apply the applicable legislation with respect to practical situations that may occur at an underground mine. You will be expected to have knowledge of safe working procedures and the causes and prevention of mine incidents.

PREREQUISITE	REQUIREMENT
	<ul style="list-style-type: none"> ■ RIBLA401E Manage blasting operations (required from 1 January 2019).
<p>Practical experience (refer to appendix B for guidance)</p>	<p>A minimum of three years practical underground mine other than coal experience, including:</p> <ul style="list-style-type: none"> ■ a minimum two years being present: <ul style="list-style-type: none"> □ with 1 year 4 months at an extraction face during production or development works and □ during other mining activities <p>(this must be included in the three years of experience required above)</p> ■ a minimum of six months experience in leading, supervising or co-ordinating workers involved in underground mining activities other than coal.
<p>Identity verification</p>	<p>Refer to section 11 of the guide for certificate of competence.</p>
<p>Emergency preparedness qualification</p>	<p>RIIERR404D - Apply and monitor underground metalliferous mine emergency preparedness and response systems, issued by a registered training organisation (the superseded unit RIIERR404A Apply and monitor underground metalliferous mine emergency preparedness and response systems, or other equivalent superseded unit number is acceptable).</p>

13.11.2. Oral examination details

The oral examination will relate to the implementation and management of safety management systems, ANTS (Associated Non-Technical Skills) and management of emergency events.

13.12. Quarry manager of mines other than underground mines or coal mines

13.12.1. Prerequisites

A Stage 1 – application for examination must be accompanied by evidence that you have the following:

PREREQUISITE	REQUIREMENT
Tertiary qualification	<p>Any one of the following:</p> <ul style="list-style-type: none"> ■ Bachelor of Mining Engineering issued by an Australian university, or ■ RII60120 Advanced Diploma of Metalliferous Mining issued by a registered training organisation (the superseded qualification RII60115 Advanced Diploma of Metalliferous Mining, is acceptable or superseded equivalent qualification), or ■ RII50120 Diploma of Surface Operations Management issued by a registered training organisation (the superseded qualification RIIERR50115 Diploma of Surface Operations Management, is acceptable or superseded equivalent qualification), or ■ Bachelor of Science issued by an Australian university and a Graduate Diploma in Mining Engineering issued by an Australian university, or ■ Bachelor of Mechanical Engineering issued by an Australian university and evidence of study in mining subjects related to rock mechanics/mine slope stability and blasting, or ■ Bachelor of Civil Engineering issued by an Australian university and evidence of study in mining subjects related to rock mechanics/mine slope stability and blasting.
Practical experience (refer to appendix B for guidance)	A minimum of four years* practical mine (other than underground or coal) experience, including:

PREREQUISITE	REQUIREMENT
	<ul style="list-style-type: none"> ■ a minimum two years being present: <ul style="list-style-type: none"> ▣ at an extraction face during production or development works or ▣ during other mining activities <p>(this must be included in the four years of experience required above)</p> <ul style="list-style-type: none"> ■ a minimum one year in a supervisory role responsible for the control and management of mining operations other than underground or coal mines, with minimum 6 months in mining activities at the mine. <p>* in the four years of experience, up to one year in any other class of mine may be included.</p> <p>Note: refer to the <i>Further specific guidance for certificates</i> section of Appendix B</p>
Identity verification	Refer to section 11 of the guide for certificate of competence.
Emergency preparedness qualification	RIIERR601E Establish and maintain mine emergency preparedness and response systems, issued by a registered training organisation (the superseded units RIIERR601D and RIIERR601A Establish and maintain mine emergency preparedness and response systems, or other equivalent superseded unit number is acceptable).
Blasting experience	Blasting experience is no longer a pre-requisite. Applicants should refer to the <i>Further specific guidance for certificates</i> section of Appendix B

13.12.2. Written examination details

The written examination consists of the following papers:

PAPER	METHOD OF EXAMINATION	DURATION OF PAPER
Paper A – Legislation knowledge	Closed book	1 hour
Paper B – Legislation knowledge and application	Closed book	2 hours

Paper A – Legislation knowledge

You will be required to demonstrate a working knowledge of the *Work Health and Safety Act 2011*, *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, *Explosives Act 2003* and their supporting regulations, and the latest version of Australian Standard 2187 Explosives – Storage, Transport and Use, as they relate to the duties of a quarry manager.

Paper B – Legislation knowledge and application

You will be required to interpret and apply the applicable legislation with respect to practical situations that may occur at an above ground mine or quarry. You will be expected to have knowledge of safe working procedures and the causes and prevention of mine incidents.

14. Appendix B – Experience pre-requisites explained

From 1 April 2021 for all exam closing dates for the 2021/22 financial year applicants must satisfy the new experience pre-requisites. The exception is candidates applying to resit examinations who have already been approved.

Appendix A sets out the requirements for each certificate of competence including extraction and supervisory experience, which are further explained below. This guidance will be applied by the Resources Regulator and examiners to determine whether an application satisfies those experience pre-requisites.

This appendix explains the requirements to indicate whether your experience may satisfy the pre-requisites.

The minimum amount of time specified for each type of experience can be satisfied by adding up the various periods of your employment either where you worked:

- continuously doing activities at a location or
- where you worked for part of the time or shorter periods at one or more locations.

14.1. Clarification of practical experience

Applicants should refer to the [Resources Regulator statutory function position descriptions and competencies page](#) for guidance on the type of activities that may qualify as '*practical mine experience*'. The statutory function position descriptions describe the tasks an individual carries out to exercise the function. The competency framework identifies seven areas of competence required to exercise each statutory function and includes examples of the type of work activities that demonstrate the competency. While applicants cannot have exercised the statutory function, they can obtain practical mine experience for the competencies.

Further to this, applicants should refer to the [sample of practical experience](#) supplied in support of an application. This sample shows an example of an application that was rejected (including the reasons why the experience was not acceptable), and an example of how practical experience should be supplied in support of an application.

The breakdown of total practical experience pre-requisites for each certificate exam are as follows:

EXAM	TOTAL PRACTICAL EXPERIENCE YEARS FOR CLASS OF MINE SPECIFIED	OTHER CLASS OF MINE OR INDUSTRY EXPERIENCE ALLOWED (MAXIMUM)
Supervisors (deputies, open cut examiners, and underground supervisors)	3 years	Zero
Middle managers (undermanagers and quarry managers) Specialists (electrical engineers and mechanical engineers)	4 years	Undermanager – zero Quarry manager (1 year in any other class of mine). Mechanical and electrical engineer (2 years – 1 year in any other class of mine and 1 year working as the type of engineer in another industry).
High level managers (mining, electrical, and mechanical)	5 years	Mining engineering managers (up to 1 year in any other class of mine). Mechanical and electrical engineering managers (2 years - up to 1 year in any other class of mine and up to 1 year working as the type of engineer in another industry).

14.2. Extraction experience

All applications require extraction experience as a pre-requisite. This experience will enable a person to sufficiently obtain and maintain an understanding of hazards and risks from processes and the environment. They will know how they are controlled within the development, implementation and/or application of the safety management system, as relevant to the statutory function. By possessing the required experience applicants should be ready to undertake the examination process and potentially be assessed as competent. Refer to the section above on what is ‘practical mine experience’ which extraction forms part of.

The extraction experience requirements are summarised in the table below for each certificate with types explained.

CERTIFICATES

EXTRACTION REQUIREMENTS AS PART OF PRACTICAL MINE EXPERIENCE

Mining managers and supervisors

At least the specified number of years being present:

- for a minimum period specified at an extraction face during production or development works, and
- during other mining activities.

Electrical engineering

At least the specified number of years involved in the installation, commissioning, maintenance and repair of electrical plant and installations; and within the specified number of years' experience, one year must involve electrical plant and installations:

- with a minimum period specified at an extraction face during production or development works, and
- during other mining activities.

Mechanical engineering

At least the specified number of years involved in the installation, commissioning, maintenance and repair of mechanical plant; and within the specified number of years' experience, one year must involve mechanical plant:

- for a minimum period specified at an extraction face during production or development works, and
- during other mining activities.

14.2.1. Types

Extraction face during production or development: physically participating in work where material is being excavated to access or mine the mineral. Examples of experience that may be suitable to provide are:

- a) Where a continuous miner or longwall are operating
- b) Where a jumbo or production drill are operating
- c) Where explosives are being used to blast the material
- d) Where plant is being used to remove the overburden or the excavated material such as the open cut pit or at the stope
- e) Development of a tunnel/drive to access the mineral to be mined

During other mining activities: this is all other experience that relates directly to the extraction face/mining activities but may not require you to be physically present. Examples that may be suitable are:

Works underground

- a) The installation, commissioning, inspection and maintenance of plant, installations and structures such as:
 - conveyors,
 - pumping
 - ventilation
 - water and air reticulation
 - sand fill/paste fill infrastructure and reticulation
 - workshops
 - materials handling and beneficiation plants (such as CHPP)
 - electrical reticulation or gas drainage systems
- b) The installation and inspection of ground support
- c) Construction, inspection and maintenance of roads and drainage systems

2. Surface works

- a) The installation, commissioning, inspection and maintenance of plant, installations and structures such as crushers, conveyors, pumping, workshops, materials handling and beneficiation plants (such as CHPP), electrical reticulation or gas drainage systems
- b) Construction, inspection and maintenance of roads and drainage systems

Other related activities

- a) Carrying out a risk assessment or developing principal hazard management plans/control plans related to the processes at the extraction face
- b) Developing plans or drawings for plant and workers to establish, implement or apply at the extraction face
- c) Co-ordinating and planning of production related activities

14.2.2. Ratio of types to make up total years of extraction experience

The ratios of experience and lengths of period required for:

at the extraction face during production or development works

versus

during other mining activities

to make up the **minimum total years of extraction requirements** varies according to the relevance to the certificate type.

Note: Some of the underpinning concepts for applying ratios are drawn from the *Code of practice: Mechanical engineering* (supervision) and the *Guide: Maintenance of competence for practising certificates* (types of learning ratios for formal versus non-formal/informal).

Supervisor examinations

Of the required two years extraction experience, applicants for supervisor examinations (deputies, open cut examiners and underground mine supervisors) must have:

- **a minimum of 1 year and four months** (2/3 of 2 year minimum) being present at an extraction face during production or development works and
- **the remaining required experience of 8 months**, to make up the total 2 years may come from other mining activities.

Mining 'middle' managers

Of the required two years of extraction experience, middle managers (undermanager, quarry manager) must have:

- **a minimum of 1 year** (half of 2 years) being present at an extraction face during production or development works
- **the remaining required experience of 1 year** to make up the total 2 years may come from other mining activities.

Electrical and mechanical engineers and managers

Of the required one year of extraction experience, they must have:

- **a minimum of 6 months** (half of 1 year) being present at an extraction face during production or development works
- **the remaining required experience of 6 months** to make up the total 1 year may come from other mining activities.

Mining engineering managers

Of the required three years extraction experience, applicants for mining engineering managers examinations (mining engineering managers for underground coal, coal mines other than underground and underground mines other than coal) must have:

- **a minimum of 1 year** (1/3 of 3 years) being present at an extraction face during production or development works
- **the remaining required experience of 2 years** to make up the total 3 years may come from other mining activities.

14.3. Supervisory experience

All applications require supervisory experience as a pre-requisite in appendix A. Refer to the guidance on what is ‘practical mine experience’ of which supervision forms part. Applicants should also refer to the ‘Guide: Assessing associated non-technical skills (ANTS) competencies for certificates of competence’ for how supervisory competencies are assessed in the examinations and what their experience should provide.

The supervisory experience requirements are summarised in the table below for each certificate type.

CERTIFICATES	SUPERVISORY REQUIREMENTS AS PART OF PRACTICAL MINE EXPERIENCE
Mining managers/ undermanagers	Minimum period specified in a supervisory role responsible for the control and management of mining operations at the class of mine specified, with a minimum period in mining activities at the mine.
Supervisors (deputy/OCE/UG mine supervisor)	Minimum period specified in leading, supervising or co-ordinating workers involved in mining activities at the class of mine specified.

Electrical Minimum specified period in a supervisory role responsible for electrical plant and installations at the class of mine specified.

Mechanical Minimum period specified in a supervisory role responsible for the control and management of mechanical plant at the class of mine specified.

Requirements for supervisors are more specific than other types of certificates to give certainty that a broader range of activities are acceptable.

For supervisory requirements, the meaning of mining activities is given in the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* section 7(1)(a) and summarised in the [Guide: Understanding the term ‘mining operations’](#):

‘...activities carried out for the purpose of extracting minerals from the ground or exploring for minerals. Activities where the primary purpose of the activity is to inject a mineral into the ground or to return a mineral to the ground are also mining activities.’

Supervision of mining activities at the class of mine specified must include:

- at the extraction face and
- development or production works associated with the extraction face
- in support of the extraction activities eg. longwall moves, installation of mine services, ventilation, conveyor installations, pumping, materials handling and beneficiations (such as upgrading plant).

Refer to extraction experience guidance above for more relevant information and examples.

Acceptable supervisory experience for mining activities will **not** include activities in sections 7(1)(b) to 7(1)(e) of the WHS (Mines and Petroleum Sites) Act.

14.3.1. Types

The types of supervision that can satisfy total supervisory experience requirements are:

SUPERVISE

OVERSEE OR DIRECT SOME PART OF MINING OPERATIONS

Direct supervision Verifying through direct observation that mining activities (or applicable plant and installations) at the class of mine and any contractors involved are applying the requirements of the safety management system.

General supervision

Where the individual may not always be present or directly responsible for supervising the mining activities (or applicable plant and installations) at the class of mine but will monitor to ensure that the safety management system is implemented, applied and monitored, and provide advice to supervisors and workers.

The context of 'supervision' has been extended to include 'leadership' and 'coordination' which may include*:

- coordination of mining activities, where the candidate is organising, planning and scheduling work, and/or
- showing leadership within the work group, where the candidate demonstrates they enlist support from others in the work group in achieving a common task safely, and/or
- mentoring or coaching others to develop their skills either in a specific task (as a coach in a formal setting), or in an informal setting as a mentor in developing another's knowledge and skill in an overall sense including providing support.

***Note:** for supervisor type functions, examination leadership and co-ordination are stated in the requirements with supervision as being accepted. For other certificate examinations leadership and co-ordination experience will be considered as acceptable as part of the required supervision experience details.

A person is not required to be appointed to a position at the class of mine that contains supervisor, co-ordinator or leader in the title in order for the experience to be able to be claimed. It is about whether the experience in any role qualifies according to the criteria. For example, a member of a crew may list tasks they carry out that qualify.

14.4. Further specific guidance for certificates

14.4.1. Electrical Engineering Manager for underground coal mines and Electrical Engineer for mines other than underground coal mines

The examination panel for this certificate of competence recommend that applicants obtain a broad range of experience at a mine to better prepare them to undertake the exams successfully. Applicants may seek out opportunities to gain experience in the tasks below that may qualify as satisfying the experience requirements in appendix A:

EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISION
a) supervising workers performing electrical related tasks	√			√
b) contributing to, completing assigned actions for, and verified the effective implementation of actions for risk assessments associated with managing electrical risks or hazards at a mine (depends on what area of mine)	√			
c) facilitating or participating in a risk assessment associated with managing hazards	√			√
d) supervising or being involved in the procurement, installation, commissioning, operation, maintenance and overhaul of plant and structures	√			√
e) involved in an incident investigation	√			√
f) involved in determining the root cause of an incident, potentially involving a third party (such as an OEM, technical expert, or contractor)	√			
g) presenting the outcomes of an investigation or root cause analysis to	√			

the site management team and workforce				
h) developing and implementing a maintenance strategy for electrical plant or structure	√			
i) identifying plant or structures regularly in use in that type of mine, and not experienced by the candidate, to gain further understanding in order to have a comprehensive mechanical knowledge	√			
j) involved in the review of competency requirements for electrical trades persons, and their authorisation or appointment to perform work on your site	√			
k) managing a contract for performing work by an external contractor on your site	√			√

14.4.2. Mechanical Engineering Manager for underground coal mines, and Mechanical Engineer for mines other than underground coal mines

The examination panel for this certificate of competence recommend that applicants obtain a broad range of experience at mines to better prepare them to undertake the exams successfully. Applicants may seek out opportunities to gain experience in the tasks below that may qualify as satisfying the experience requirements in appendix A:

EXPERIENCE GUIDANCE	TOTAL MINE	EXTRACTION	OTHER MINING ACTIVITIES	SUPERVISION
■ mining engineering	√			
■ geology	√			
■ mine design	√			
■ rehabilitation studies.	√			