

# Recognised Standard 22

Management Structure for the development and implementation of the Safety and Health Management System

Resources Safety and Health Queensland

August 2021

Coal Mining Safety and Health Act 1999

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## Recognised standards

This document is issued in accordance with PART 5—RECOGNISED STANDARDS and Section 37(3) of the Coal Mining Safety and Health Act 1999.

#### **PART 5 - RECOGNISED STANDARDS**

#### 71 Purpose of recognised standards

A standard may be made for safety and health (a "recognised standard") stating ways to achieve an acceptable level of risk to persons arising out of coal mining operations.

#### 72 Recognised standards

- (1) The Minister may make recognised standards.
- (2) The Minister must notify the making of a recognised standard by gazette notice.
- (3) The CEO must publish on a Queensland government website each recognised standard and any document applied, adopted or incorporated by the standard.
- (4) In this section—

**Queensland government website** means a website with a URL that contains 'qld.gov.au', other than the website of a local government

#### 73 Use of recognised standards in proceedings

A recognised standard is admissible in evidence in a proceeding if—

- (a) the proceeding relates to a contravention of a safety and health obligation imposed on a person under part 3; and
- (b) it is claimed that the person contravened the obligation by failing to achieve an acceptable level of risk; and
- (c) the recognised standard is about achieving an acceptable level of risk.

#### **PART 3 - SAFETY AND HEALTH OBLIGATIONS**

#### 37 How obligation can be discharged if regulation or recognised standard made

- (3) .... if a recognised standard states a way or ways of achieving an acceptable level of risk, a person discharges the person's safety and health obligation in relation to the risk only by—
  - (a) adopting and following a stated way; or
  - (b) adopting and following another way that achieves a level of risk that is equal to or better than the acceptable level.

Where a part of a recognised standard or other normative document referred to therein conflicts with the *Coal Mining Safety and Health Act 1999* or the Coal Mining Safety and Health Regulation 2017, the Act or Regulation takes precedence.

This recognised standard is issued under the authority of the Minister for Resources.

[Gazetted 27 August 2021]

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## 1 Purpose

This Recognised Standard states a way for a Site Senior Executive (SSE) to develop and maintain a management structure in accordance with the *Coal Mining Safety and Health Act 1999* (CMSHA) to ensure the risk from coal mining operations is at an acceptable level.

## 2 Scope

## 2.1 Intent

SSEs are required to develop a Management Structure for the development and implementation of the Safety and Health Management System (SHMS) for their mine.

SSEs have the obligation to determine the competency requirements of positions delegated responsibility under the SHMS and to document those competencies in their Management Structure to ensure operations are at an acceptable level of risk. The competency requirements must be relevant to the risks at the mine and ensure the development and implementation of the mine's SHMS.

The absence of a competency prescribed by the CMSHA, the Coal Mining Safety and Health Regulations 2017 or by the Coal Mining Safety and Health Advisory Committee (CMSHAC) does not mean no competency is required. The determination of responsibilities and competencies for the safety of persons at the mine are the obligation of the SSE for the mine. This Recognised Standard states a way to achieve an acceptable level of risk in relation to the development, implementation, and maintenance of a Management Structure at a Queensland coal mine.

## 2.2 Application

This Recognised Standard applies to all Coal Mines as defined under the CMSHA and relates to the requirements of sections 7, 41, 42, 55, 60 and 66 of the CMSHA.

# 3 Definitions and Meanings

Term	Meaning	
AQF	Australian Qualifications Framework which represents the levels of competency recognised within Australia.	
Competence	Competence for a task at a coal mine is the demonstrated skill and knowledge required to carry out the task to a standard necessary for the safety and health of persons. (Section 12)	
Hazard Management Plan	The management plan developed to control and manage a hazard to achieve an acceptable level of risk from coal mining operations	
Principal Hazard	A hazard with the potential to cause multiple fatalities.	
Principal Hazard Management Plan (PHMP)	The management plan developed to control and manage the principal hazard to achieve an acceptable level of risk from coal mining operations.	
RII	The Resources and Infrastructure Industries Training Package	
Senior Position	A position at the mine, required by the Site Senior Executive, to be responsible for the development of relevant parts of the safety and health management system.	
Supervisory Position	A position at the mine, required by the Site Senior Executive, to be responsible for the implementation or applying and monitoring of relevant parts of the safety and health management system.	
Supervisor	A supervisor at a coal mine is a coal mine worker who is authorised by the site senior executive to give directions to other coal mine workers in accordance with the safety and health management system.	
CMSHA	Coal Mining Safety and Health Act 1999	
SHMS	Safety and Health Management System	
SSE	Site Senior Executive (The most senior officer employed or otherwise engaged by the coal mine operator, who is located at or near the coal mine and has responsibility for the coal mine)	

## 4 Application Framework

The overarching framework that an SSE should follow for development of a Management Structure is set out in Figure 1.

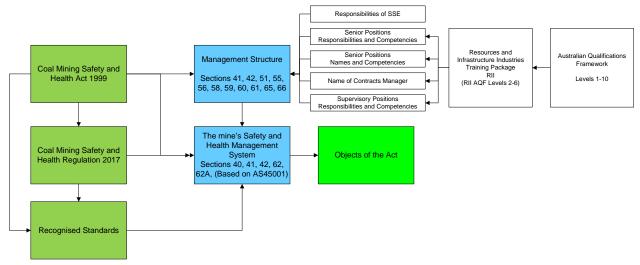


Figure 1. Overarching Framework

#### **Risk Assessment**

The Management Structure for the implementation of a SHMS must be developed from a whole mine site risk assessment. The purpose of the risk assessment is to identify principal and fatal hazards which may affect the safety and health of mine workers, and the requirements for a Management Structure to control the hazards under the SHMS.

The process set out in Figure 2 provides for key steps and considerations to be taken by the SSE, in the development of the Management Structure for the mine, to determine the responsibilities and competencies required in the Management Structure to implement the SHMS.

- •SSE appointed by Coal Mine Operator
- •Coal Mine Operator ensure SSE develop and maintains a management structure for the implementation of the SHMS
- •SSE determines operational requirements for the mine and conducts a whole of mine risk assessment (Broad brush)
- •The risk assessment identifies Principal Hazards (multiple fatality), Serious risks (Fatality and serious harm) and health exposure risks that may affect the safety and health of persons as a result of Coal Mine operations
- •SSE determines the requirements of the SHMS for managing the risks identified
- •SSE determines the Senior positions for the development and implementation of the SHMS and allocates responsibility for PHMPs , Fatal hazards, other hazard management plans and SOPs to those persons
- •SSE states the responsibilities in the management structure
- •SSE states the competencies required for these positions in the management structure
- •SSE determines each supervisory position required for the implementation of the SHMS including PHMPs, Fatal hazards, other hazard management plans and SOPs
- •The SSE must state responsibilities of each supervisory position in the management structure
- •The SSE must state the competencies required for the positions
- •The documented management structure is entered into the Mine record
- •The documented management structure is sent to an inspector in the region in which the mine is situated
- •The document should include a diagram representing the relationships between positions

Figure 2: Key process steps for Management Structure Development

## 5 Management Structure

There are three positions or categories of position identified in the Management Structure under Section 55 of the CMSHA:

- SSE
- Senior positions (includes contractors' manager and service providers)
- Supervisory positions

Each of these positions have a role in developing, implementing, applying, and monitoring the SHMS dependant on their level of responsibility.

#### 5.1 Positions

The Management Structure must include Senior and Supervisory Positions and be notified as per the requirements of s55 CMSHA.

Each position in the Management Structure must be responsible and competent to develop, implement or apply parts of the SHMS that are relevant to the activities that the position is responsible for. For example:

- Mining positions should be competent to develop, implement and apply the mining parts of the SHMS.
- Engineering or maintenance positions should be competent to develop, implement and apply the engineering or maintenance parts of the SHMS.
- Processing positions should be competent to develop, implement and apply the processing parts of the SHMS.

A Senior Position is a position at the mine authorised by the SSE to be responsible for the development and implementation of relevant parts of the SHMS. Parts of the SHMS include the relevant vocational field, including Principal Hazard Management Plans (PHMPs), other Hazard Management Plans, Standard Operating Procedures (SOPs) and other controls required to ensure the risk from coal mining operations is at an acceptable level.

Where positions have obligations to manage and control activities under the CMSHA the SSE should ensure that the position is placed in the structure at a level that allows them to meet their obligation.

A Supervisory Position is a position at the mine authorised by the SSE to be responsible for the implementation of relevant parts of the SHMS and the application of plans. Parts of the SHMS include the relevant vocational field, including PHMPs, other Hazard Management Plans, SOPs and other controls required to ensure the risk from coal mining operations is at an acceptable level.

Supervisors might include, but not limited to, the following types of worker:

- Superintendents.
- Supervisors.
- Coordinators.
- Production managers where they are not named as a senior position.
- Maintenance managers where they are not named as a senior position.
- Other positions that meet the definition of supervisor under the legislation, and are responsible for supervising work and giving instruction.

It is the obligation of the SSE to consider each supervisory position and determine their role in the implementation and application of the SHMS. Where supervisors are appointed to undertake safety inspections as part of their roles, they must be competent and authorised to do so. They also need to consider the various ways in which direction may be given in determining supervisory roles (See hierarchy of positions 5.5).

The SSE must then ensure that the competencies required for each supervisory position:

- are documented as a part of the notification;
- are relevant to the hazards and activities associated with the tasks to be supervised;
- include any competencies required by the CMSHAC; and
- include competencies as identified by the SSE to ensure that the supervisor is competent in the task that they are authorised to supervise with regards to the implementation, application, and monitoring of the SHMS.

When appointing supervisors in the Management Structure the SSE must consider the relevant skills and experience of the appointee, their understanding of the work to be supervised and what their responsibilities are in implementing, applying and monitoring the SHMS.

The supervisor's responsibilities must be communicated to the persons appointed when they are authorised to carry out the responsibilities of the position. A record of the acceptance of these responsibilities should be maintained.

### 5.2 Senior Position for Managing Contractors and Service Providers

Each coal mine is required to state the name of the person who is responsible for establishing and implementing a system for managing contractors and service providers at the coal mine (s55(2)(ca) CMSHA).

#### 5.3 Underground Coal Mines

The SSE must appoint a person to be underground mine manager to control and manage the underground mine. This could be the SSE if they have the necessary competencies.

In addition the SSE must appoint, if the mine is to be managed on a commute system, the alternate underground mine manager (s60 CMSHA).

In determining the senior and supervisory positions of the underground mine the SSE must ensure that the underground mine manager is able to fulfil their obligation to control and manage the mine (s60(2) CMSHA).

### 5.4 Competencies

The competencies required for positions in the Management Structure must be stated.

The competencies must be consistent with responsibility of the position and relevant to the levels of responsibility described in the <u>Australian Qualifications Framework</u>, the <u>RII Training Package</u> or other relevant competency for the risk at the mine. The description of the levels of competency from the RII Implementation Guide are provided in Appendix 1: RII Competency Fields. The SSE must state the competencies required for the positions in the Management Structure.

In determining position competence requirement, an SSE must consider the Australian Qualifications Framework to determine the appropriate level of competency and the Resources and Infrastructure Industry training packages, mine site-specific training and competency content, and experience of the worker etc. The SSE may determine that a position does not require an RII accreditation, but must be able to demonstrate that the basis competence assessment, meets or exceeds the endorsed components of the resource and industry training packages (see Appendix 1). This may include the use of RPL/RCC as defined in Recognised Standard 11.

The appropriate levels of competency are described below in the coal sector pathway in Table 1.

Table 1: Coal sector qualification pathway

AQF Level of	Employee level of classification	
Competence		
Certificate I Level	is a pathway into Certificate II and III qualifications. The qualification raises awareness of the sector. This qualification alone will not usually lead to employment opportunities.	
Certificate II Level	reflects the role of an operator at work, under supervision. This role requires the observation of effective communication, compliance with site work processes and working safely.	
Certificate III Level	reflects the role of employees, working at a trade level under limited supervision, such as production operators and miners.	
Certificate IV Level	supervisory roles complete this qualification on the job. Advanced operations and the responsibility for quality and quantity of work are introduced at this level.	
Diploma Level Certificate Level V	is completed by departmental managers, who can demonstrate the application of a broad range of technical, managerial, coordination, planning and implementation skills on the job.	
Advanced Diploma Level Certificate Level VI	is undertaken by mine managers etc. They are required to initiate solutions to technical problems, plan strategically and are responsible for the overall business.	

## 5.5 Hierarchy of Positions

## 5.5.1 Examples of Positions in the Management Structure

AQF level	Position	Description of Position	SHMS Role
Level 6 +	Senior	Manager/Superintendent	Establish (Develop) and maintain
Level 5	Supervisory	Superintendent / Coordinator	Implement
Level 4	Supervisory	Supervisor	Apply and Monitor

#### 5.5.2 Other Coal Mine Workers

AQF level	Position	Description of Position	SHMS Role
Level 3	Coal Mine Worker	Skilled mine worker, Tradesperson	Conduct activities
Level 2	Coal Mine Worker	Induction level competency,	Conduct basic tasks

## 5.6 Areas of Competence

To be assessed as competent, a person should have a range of competency across a spectrum of required knowledge. These areas of competence should include:

- Knowledge of legislative or procedural requirements;
- Knowledge of safety and risk management practices;
- Knowledge of controlling hazards relevant to the activity and the position's responsibilities; and
- Knowledge of emergency management.

Examples of Competency Fields from the RII Training Package are included in Appendix 1.

## 6 Competencies recognised by the Advisory Committee

CMSHAC has a function of recognising, establishing, and publishing:

- (a) The competencies accepted by it as qualifying a person to perform the tasks prescribed under a regulation; or
- (b) The safety and health competencies required to perform the duties of a person under the CMSHA.

CMSHA requires the SSE not to assign the task of a Supervisor to a person unless the person:

- (a) Is competent to perform the task assigned; and
- (b) If there is a safety and health competency for supervisors recognised by the committee, has the relevant competency.

For positions where competencies are recognised by CMSHAC, the person must have those competencies in addition to those required by the SSE to ensure that the person is competent for the task assigned.

For example, an Underground Mechanical Engineer is required to have a competency of RIIRIS402, providing a competency for risk management, however there are no required competencies relevant to the other areas of competency, particularly with respect to Mechanical Engineering. The SSE must ensure the person has appropriate competencies that allow the Mechanical Engineer to develop the mechanical engineering parts of the mine's SHMS and should include:

- Knowledge of legislative requirements;
- Safety and risk management competencies (RIIRIS402 is required by CMSHAC);

- Mechanical Engineering competencies (for example Degree or Diploma of Mechanical Engineering, or RIIRAI605, RIISAM602); and
- Emergency Management Competencies.

Where positions have no prescribed competencies at all, such as a Mechanical Engineer for a surface mine, it does not mean that there are no competencies required for the position. The SSE must ensure that the competency the position requires that will allow for the development of the mechanical parts of the mine's SHMS relevant to the risks associated with that mine are stated, and should include:

- Knowledge of legislative requirements;
- Safety and risk management competencies (for example, RIIRIS402);
- Mechanical Engineering competencies (for example, Degree or Diploma of Mechanical Engineering RIISAM602, RIIRAI611); and
- Emergency Management Competencies.

## 7 Certificates of Competency

The CMSHA requires certain positions at coal mines to have <u>Certificates of Competency</u> (CoC) issued by the <u>Board of Examiners</u> appointed under the CMSHA. The granting of the certificates requires the applicant to have completed a range of educational requirements that are relevant to the position for the certificate (AQF Levels 7+, 6, 5 or 4). Despite obtaining the CoC the person may not necessarily have completed specific units of competency that are relevant to the hazards at the mine in which they work and that they may be responsible for.

The SSE must review the units associated with the qualification required as the pre-requisite to the specific CoC to identify any knowledge gaps relevant to the risks associated at the mine and the role that the person may perform at the mine. Where gaps are identified the SSE should follow the process stated in section 5.4 of this Recognised Standard to ensure the person is competent to undertake the role.

For example, Outburst Management is not a mandatory competency or included in the core units of competency for obtaining CoCs as it is only an elective. If a risk of outburst is present at the mine the SSE must ensure persons at the mine either obtain the specific RII competency for Outburst or be assessed against the elements of the competence for managing the risk of outburst. An example of the endorsed training packages competencies is included below.

Senior Position	RIIMCU604D - Establish and maintain the outburst management plan
Superintendent/Supervisory Position	RIIMCU504D - Implement the outburst management plan
Supervisory Position	RIIMCU405D - Apply and monitor the outburst management plan
Coal Mine Worker	RIIMCU305D - Conduct outburst mining operations

## 8 Absences

When a person who is:

- mentioned in the Management Structure; and
- actively supervises coal mine workers where there is a risk to the worker; and
- is temporarily absent from duty.

The SSE must appoint another competent person to perform the person's duties while the person is absent.

If the person does not actively supervise coal mine workers where there is a risk to the worker the SSE must ensure that the absence does not create an unacceptable level of risk or appoint another competent person to fulfil the responsibilities of the position during the absence.

An SSE should consider as part of the development of the management structure which positions this obligation applies to.

Each role may be different and should be considered as part of the construction of the management structure to ensure those critical safety positions have sufficient competent resources to manage absence.

The requirement to appoint another person to the position should be relevant to the level of risk and the duration of the absence.

## 9 Changes to the Management Structure

When changes are made at the mine, the Management Structure should be reviewed. These may include:

- inclusion or removal of a position at the mine.
- Changes in responsibility of a position at the mine
- change in the competency requirements for Senior or Supervisory Positions; or
- change in the name of a person in a Senior Position.

The details of the change must be recorded in the Mine Record within 7 days and notified to an Inspector within 14 days.

A change to the names of supervisory positions is not a change to the Management Structure, however the record of the names of persons authorised to carry out the responsibilities of supervisory positions must be maintained.

## 10 Elements of a Management Structure Notification

# Management Structure Documented – Positions, Responsibilities and Competencies (elements)

The SSE must include the Management Structure in the Mine Record.

The notification to an inspector is expected to include an organisation chart showing the Management Structure for the development and implementation of the SHMS.

The elements of the notification must include:

- The responsibilities of the SSE;
- The competencies held by the SSE;
- The responsibilities of the SSE for the development of relevant parts of the SHMS that the SSE will be responsible for;
- The responsibilities of Senior Management including the specific areas of the SHMS they are delegated responsibility for (PHMPs, other Hazard Management Plans and risk);
- For an underground mine the name of the person appointed to manage and control the mine
  who has a first class certificate of competency for an underground coal mine (Where the mine
  is managed on a commute arrangement an alternate underground mine manager must be
  appointed);
- The competencies required to fulfil the responsibilities of each senior management position. This
  includes the competencies required by CMSHAC and competencies required to undertake the
  specific roles allocated by the SSE;
- The names of the persons appointed to Senior Positions (including the person responsible for establishing and implementing the contractor and service provider management system);
- The competencies held by the senior person (including the person responsible for establishing and implementing the contractor and service provider management system;
- The responsibilities of each supervisory position authorised and appointed by the SSE; and
- The competencies required for each supervisory position, relevant to their level. These are to
  include those identified by the SSE that are relevant to the hazards of the task, and include any
  required by the advisory council.

## 11 Appendix 1 RII Competency Fields

#### **Competency Fields**

#### CATEGORY 1: GENERAL FIELDS OF COMPETENCE APPLICABLE TO ALL SECTORS

- Risk Management (RIIRIS)
- Governance and Compliance (RIIGOV)
- Work Health and Safety (RIIWHS)
- Environment (RIIENV)
- Quality (RIIQUA)
- Communication (RIICOM)
- Leadership and Teamwork (RIILAT)
- Business Effectiveness (RIIBEF)
- Financial Administration and Management (RIIFIA)
- Information Management (RIIIMG)
- Customer and Community Relations (RIICCR)
- Project Management (RIIPRM)

#### CATEGORY 2: TECHNICAL FIELDS OF COMPETENCE APPLICABLE TO ALL SECTORS

- Blasting Hole Drilling (RIIBHD)
- Blasting (RIIBLA)
- Service and Maintenance (RIISAM)
- Load Handling (RIIHAN)
- Vehicle Operations (RIIVEH)
- Sampling, Testing and Data Processing and Recording (RIISTD)
- Emergency Response and Rescue (RIIERR)

# CATEGORY 3: TECHNICAL FIELDS OF COMPETENCE APPLICABLE TO SOME SECTORS (2 TO 4 SECTORS)

- Materials Extraction (RIIMEX)
- Stockpile and Reclaim Material (RIISRM)
- Mobile Plant Operations (RIIMPO)
- Processing (General) (RIIPRO)
- Plant and Equipment Operations (RIIPEO)
- Conservation and Rehabilitation (RIICAR)
- Water Management (RIIWMG)
- Waste and by-products (RIIWBP)
- Resources and Infrastructure (RIIRAI)
- Spatial Data Management (RIISDM)
- Underground Mining (RIIUND)
- Trenchless Technology (RIICTT)

#### CATEGORY 4: TECHNICAL FIELDS OF COMPETENCE APPLICABLE TO A SINGLE SECTOR

#### Coal mining

- Coal Mining (General) (RIIPEO)
- Coal Mining (Underground) (RIIMCU)
- Coal Mining (Open Cut) (RIIMCO)
- Coal Mining (Coal Preparation) (RIIMCP)
- Electrical Engineering (No RII units)
- Coal Mining (Diesel Engine Systems Maintenance) (RIIDES)

#### Drilling

- Drilling (General) (RIINHB)
- Drilling (Oil and Gas) (RIIOGD, RIIOGF, RIIOGN)
- Drilling (Well Servicing) (RIIWSV)

## 12 Appendix 2 Example of a Management Structure Diagram

