



**NSW
Resources
Regulator**

COMPETENCY FRAMEWORK

QUARRY MANAGER

of mines other than underground or coal mines

Work Health and Safety (Mines and Petroleum Sites Regulation) 2014



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1. Introduction

This document should be read in conjunction with the framework for competencies of statutory functions requiring practising certificates.

2. Legislation

Extract from the WHS (M&PS) Regs 2014, Schedule 10, Part 5, clause 31:

(1) The statutory function of quarry manager is to supervise mining operations at the mine, and

3. Competencies for quarry manager of mines other than underground mines or coal mines

The competencies of statutory functions in the framework are generally described below and specific details for this function are found in the following sections.

Situational
Awareness and
Risk Assessment

This competency covers the practitioners' actions to identify and assess risks, hazards or other issues that may affect the safe functioning of the mine. It involves gathering information, analysing emerging issues and seeking objective evidence to draw conclusions, so as to eliminate or minimise undesirable consequences.

The quarry manager of mines other than underground mines or coal mines is to apply specialised knowledge and skills in the assessment of hazards and potential risks, to support a safe workplace. These include technical and theoretical knowledge in a specific area or a broad field of work, to assist them in the demonstration of autonomy, judgement and defined responsibility in known or changing contexts and within broad but established parameters when:

- accessing and applying the relevant parts of the SMS to support the identification of hazards and potential risks
- sourcing information relevant to management of work health and safety risks, including inspections
- monitoring by obtaining data and information, verifying compliance with standards and legislation
- developing, implementing and monitoring risk assessments and controls to ensure they refer to the appropriate standards and plans, where applicable, and control the risks from hazards.

Behavioural tendencies and skills to support the demonstration of Situational Awareness and Risk Assessment:

- Source and gather information relevant to establish the status of risks and manage risks and hazards at the mine.
- Conduct and monitor workplace inspections to identify hazards and check risk controls are in place.
- Use own judgement and experience from previous situations to anticipate and identify potential issues and hazardous situations.
- Lead the management of risk, including risk assessment processes and particularly those involving principle hazards.
- Conduct or review risk assessments to ensure they refer to the appropriate standards.
- Investigate and report incidents.

A blue circular icon with a white border containing the text "Effective communication".

Effective
communication

This competency refers to the practitioners' responsibility in using appropriate, clear and effective communication to ensure instructions, hazards, risks, safety plans and other technical and non-technical issues are effectively communicated at all levels, taking into account the knowledge, expectations, requirements, interests and terminology of the intended audience. Methods of communication and ensuring the communication has been delivered and understood forms part of this competency.

The quarry manager of mines other than underground mines or coal mines is expected to transfer technical information and communicate advice on application to a variety of audiences. This includes:

- ensuring others have access to relevant documentation and information to apply standards, plans and controls
- explaining to others technical and non-technical concepts and instructions, information and/or audit outcomes when verifying compliance with standards and legislation
- participating in consultation where appropriate
- reporting any deficiencies or significant deviations from the SMS.

Behavioural tendencies and skills to support the demonstration of Effective Communication:

- Consult with others to gather relevant information to implement standards and supervise others.
- Support the implementation of appropriate channels to ensure relevant information is communicated in a timely manner to others in the mine.
- Present information in a credible manner.
- Report outcomes of inspections as per the SMS.
- Maintain written and verbal reporting requirements.

- Report deficiencies or significant deviations from the SMS, plans or controls.
- Notify the regulator of a high-risk activity and/or where an incident occurs prescribed as a notifiable incident by the WHS (M&PS) Regs 2014.

Collaboration

This competency covers the practitioners' competency to collaborate, provide support and leadership, facilitate the gathering and dissemination of information and knowledge for mine compliance. It includes behaviours and mechanisms that support the supervision, training and support of workers.

The quarry manager of mines other than underground mines or coal mines is expected to support the collaboration and supervision of others for a safe healthy and compliant mining operations. This includes:

- supervising the mining operations at the mine
- identifying key internal and external stakeholders, and engaging them as appropriate to support standards and procedures are implemented appropriately
- implementing training, instruction and assessment of workers, including any supervisors
- supporting the application and monitoring of tasks and responsibilities
- facilitating cooperation activities within the mine.

Behavioural tendencies to support the demonstration of Collaboration:

- Support and consult with relevant stakeholders to assist in the application of relevant standards and procedures.
- Collaborate with other statutory functions in applying, preparing or supervising activities.
- Supervise workers and contractors, as set out in the SMS, including managing workers and the work activities.
- Prevent or resolve conflict in a high-risk situation to minimise negative impacts, as appropriate.
- Train, instruct and inform on WHS matters and technical issues.
- Supporting others to understand and apply the relevant parts of the safety management system, including principal hazard management plans and principle control plans.

Operational decision making and initiative

This competency covers the practitioners' operational decision-making ability to initiate, plan, lead or manage the resolution of hazards and risks that have been identified to support safe mining operations. It includes the ability to respond to issues in a decisive manner, applying their knowledge and using their experience from previous situations.


The quarry manager of mines other than underground mines or coal mines is expected to apply a specialised knowledge and skills to make decisions and respond to hazards and potential risks. These

include technical and theoretical knowledge in a specific area or a broad field of work, to assist them in the demonstration of autonomy and judgement in their actions and decision-making process in known or changing contexts and within broad but established parameters. These include:

- referring to evidence and objective information when making decisions and supporting the maintenance of standards and procedures
- implementation of risk management plans and processes and supporting the application of controls plans
- assisting and reviewing procedures for contractors and their management plans.

Behavioural tendencies and skills to support the demonstration of Operational Decision Making and Initiative:

- Use evidence and judgement to support decision-making process and problem-solving.
- Make informed and timely decisions how to implement standards, systems and plans with confidence.
- Act on non-compliance or when safety concerns arise within the mine.
- Report outcomes of inspections and take timely action as required.
- Investigate and report on incidents.
- Report or receive reports on outcomes of inspections and take appropriate action to manage hazards or risks identified, in accordance with the SMS.
- Preservation of a scene for an incident, investigate and report on incidents.
- Escalate issues as prescribed by legislation.



Organised and
disciplined

This competency covers the practitioners' abilities in planning and organising their work and the work of others, to support processes being followed, tasks prioritised, and inspections and checks are completed in a systematic manner as per legislation. It includes supporting systems, plans and procedures that are implemented, maintained and updated as required.

The quarry manager of mines other than underground mines or coal mines is expected to apply a specialised knowledge and skills to manage WHS and safety risks at the mine in an organised and systematic manner. This include:

- organising sufficient and appropriate WHS resources for workers
- supporting the organisation of activities when maintaining the currency of standards and procedures that form part of the SMS
- monitoring and reviewing in a systematic and organised manner the relevant parts of the safety management system, including principal hazard management plans and principle control plans

- ensuring systems and plans are maintained, updated, and implemented appropriately.

Behavioural tendencies to support the demonstration of Organised and Disciplined:

- Act in a consistent manner and in a range of contexts, especially when supervising and leading others.
- Implement standards and processes as per the SMS requirements.
- Conduct timely inspections.
- Organise sufficient and appropriate WHS resources for workers.
- Monitor tasks and actions, anticipate limitations or challenges and adjusts plans accordingly.
- Monitor the compliance of the safety management system with reporting mine incidents, matters and reportable incidents to the regulator prescribed by the WHS (M&PS) Regs 2014.
- Work in a systematic manner (e.g. when supervising, inspecting areas of the mine, and implementing standards).
- Implement task/work plans and verification of control plans.

Driven by
safety and
integrity

This competency refers to the practitioners' capability to act so as to comply with legislation, as well as supporting others to adhere to legislation. It includes their ability to persist with challenging tasks through sustained commitment and effort whilst maintaining standards, and their ability to model high standards of behaviours for others through own behaviour.

The quarry manager of mines other than underground mines or coal mines is expected to apply specialised knowledge and skills to act consistently in accordance to legislation, standards and procedures, and support others to adhere to those principles consistent with existing legislation. This includes:

- acting and supporting others across the mine behave in a consistent manner that is accordance with legislation
- monitoring and verifying areas where legislation and safety standards are compromised
- following instructions and guiding others on how to comply to existing legislation, standards and procedures
- ensuring the SMS requirements are communicated to appropriate workers at the mine.

Behavioural tendencies to support the demonstration of Driven by Safety and Integrity:

- Exercise their function and support others in their understanding of their expectations and duties for compliance and achieving WHS.
- Implement the relevant standards and the parts of the SMS to support safety operations in the mine, including the emergency plan to manage workers to safely withdraw or escape.

- Implement change after investigations and markets to all about the change, including peers and legislators, about findings and improvements.
- Monitor the performance and compliance of the relevant parts of the SMS against the specified standards.
- Use their specialised technical knowledge to identify signs of non-compliance within the mine.
- Admit mistakes and is open and transparent with others in a timely manner.
- Investigate and report on incidents, including preserving the scene for certain reportable incidents.

Responsiveness to change

This competency refers to the practitioners' capability to use and apply their relevant knowledge of legislation and standards, previous experience and skills to respond to changing circumstances in the mine they operate in.

The quarry manager of mines other than underground mines or coal mines is expected to apply specialised knowledge, skills and specific experience to implement contingencies plans and accommodate to change. This includes:

- implementing and supporting the application of changes in plans and processes to emerging circumstances, without compromising compliance
- providing technical advice and support to others to remain effective during stressful situations.

Behavioural tendencies to support the demonstration of Responsiveness to Change:

- Suggest and implement changes to ensure outcomes are met (which would otherwise be compromised).
- Implement change management processes and support the application of new plans and processes where required.
- Addresses changing conditions, informs and provide technical advice.
- Seek for advice or instruction when implementing new processes and standards.
- Continue to operate effectively in stressful situations, remaining focused when mine plans change.
- Implement contingency plans where required, adjusting plans accordingly.
- Think flexibly when required in the face of new events.
- Maintain focus and clear purpose in a dynamic environment with multiple demands.

Technical
knowledge
and skills

This refers to the practitioners' capability to demonstrate technical skills and specific knowledge to be able to act or apply the requirements of legislation, standards, systems, procedures and processes.

The quarry manager of mines other than underground mines or coal mines is to apply a specialised knowledge and skills, including technical and theoretical knowledge, in a specific area or a broad field of work, to assist the demonstration of autonomy, judgement and defined responsibility in known or changing contexts and within broad but established parameters. This includes:

- mining and WHS systems
- legislation
- emergency management
- general WHS topics
- general knowledge to support the demonstration of technical skills incorporating associated non-technical skills.

Technical knowledge and skills required

Mining and WHS systems

Safety management system (SMS)

- Understand their obligations in implementing the relevant parts of the SMS and standards.
- Implement established standards and the SMS and ensure these are maintained.
- Identify gaps relevant for the implementation of standards and processes.
- Identify non-compliance to processes and high risks activities within the mine, as prescribed by the WHS (M&PS) Regs 2014.
- Complete inspection and maintenance requirements.
- Preserve the scene of certain incidents for assessment where required.
- Monitor work practices, regarding their compliance to the SMS.
- Engineering standards (e.g. electrical), including lifecycle of electrical plant and installations at the mine.
- Monitor and measure the performance of specific aspects of the SMS.

- Anticipate when achieving the SMS expectations may be compromised and proactively mitigates this.
- Operational planning within the scope of their function.
- Critical systems and devices.
- Reporting and action tracking/completion.
- Implementing the system for managing audits (i.e. qualifying auditors, scheduling, documenting results and tracking recommendations).
- Conducting and documenting risk assessments.
- Reviewing results of risk assessment.

Principal hazards (catastrophic fatal hazards) as listed in schedule 1 - Work Health and Safety (Mines) Regulation 2014 under the *Work Health and Safety (Mines) Act 2013*

- Lead the implementation and monitoring of the principal hazard management plans for all applicable prescribed principal hazards in WHS (M&P) Regs 2014, clause 5 and any other.
- Demonstrate an ability to apply knowledge in a wide range of contexts of requirements included in 'Principal mining hazard management plans— additional matters'.
- Keep accurate and detailed records and inspection reports, as required by the SMS.
- Monitor and mitigate risks to health and safety associated with the principal mining hazard.
- Remain focused on critical tasks over a period of time without being distracted.
- Understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening.

Principal control plans as listed in schedule 2 - Work Health and Safety (Mines) Regulation 2014 under the *Work Health and Safety (Mines) Act 2013*

- Demonstrate an ability to apply knowledge in a wide range of contexts of relevant control plans within the scope of their area of responsibility (e.g. worker health, electrical engineering).
- Act as per relevant control plan.

Specific control measures in Work Health and Safety (Mines) Regulation 2014 under the *Work Health and Safety (Mines) Act 2013*

- Check that each control measure in relation to major incidents is adequately supported by relevant systems within the SMS within the mine.
- Implement and supervise the application of specific control measures as instructed.
- Identify appropriate controls, using the hierarchy of control, to manage risks and anticipate limitations or challenges of implementing control measures within their assigned area of mine operations.
- Evaluation and review of risk controls, using the hierarchy of controls.
- Contingency planning.
- Keep up to date on current and emerging health and safety issues in mining operations.
- System for monitoring the performance of control measures.
- Performance indicators to identify effectiveness and failure of control measures.
- Corrective actions in the event of failure of controls and in the event of the indicators not meeting performance targets.
- Follow-up action items to close any gaps.

Legislation

Apply a specialised knowledge and skills, including technical and theoretical knowledge, in a wide range of contexts of acts, regulations, approved codes of practice, instruments, standards, and guidelines relevant to the execution of their function, sourcing and consulting with others, such as:

- *Work Health and Safety Act 2011* and *Work Health and Safety Regulations 2017*.
- *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and *Work Health and Safety (Mines and Petroleum Sites) Regulations 2014*.
- *Explosives Act 2003* and *Explosives Regulation 2013*.
- approved codes of practice under the *Work Health and Safety Act 2011*.
 - international and Australian/New Zealand Standards.

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| <p>Emergency management</p> | <ul style="list-style-type: none"> • Implement the emergency plan to supervise workers to safety withdraw or escape. • Supervise the application and monitoring of emergency plans. • Emergency preparedness and response systems, evacuation, notification and response. • Health and safety issues in mining operations and the provision of medical treatment and assistance. • Procedures and conditions under which persons at the mine are to be withdrawn to a place of safety. • Continue to operate effectively in stressful situations. • Maintains focus and clear purpose in a dynamic environment with multiple demands. • Think flexibly when required in the face of new events. • Implement pre-incident plans. • Investigate incidents and manage system, including reporting and investigation procedures, and tracking remedial actions. |
| <p>General WHS topics</p> | <ul style="list-style-type: none"> • Demonstrate an ability to apply knowledge of relevant topics included in the <i>Guide for Maintenance of competence scheme for statutory functions requiring practicing certificate</i>. |
| <p>General knowledge to support the demonstration of technical skills incorporating associated non-technical skills</p> | <ul style="list-style-type: none"> • Supervision and management processes. • Conflict resolution processes in a high-risk situation. • Strategies for sourcing information relevant to their area and responsibility. • Incident investigation processes. • Range of communication techniques to convey information to others. • Tools/equipment, systems and processes to ensure others are well informed of issues or relevant decisions. • Requirements for written communications including report writing. • Document control and procedures for documenting relevant communications. • Meeting procedures and follow-up requirements. • Resources available, plans and processes within the mine. • Computerised maintenance scheme. |

- Environmental conditions may impact the implementation of standards and processes and the management of risks.
- Auditing principles, range of processes and tools to undertake auditing practices.
- Contingency planning.
- Environmental requirements and procedures, including vibration, noise, dust and/or chemicals.
- Organise sufficient and appropriate WHS resources for workers.
- Supervise contractors and their management plan.
- Monitor tasks and actions, anticipate limitations or challenges and adjusts plans accordingly.
- Implement change after investigations and markets to all about the change, including peers and legislators, about findings and improvements.