Statutory function description

Mining engineering manager of underground mines other than coal mines

Introduction

Type	Details
Name of the statutory function	Mining engineering manager
Class of mine	Underground mines other than coal mines
Key statutory function?	Yes
Mining supervisor?	Yes

Statutory functions are certain safety-critical roles in the mining and extractives industry that are regulated by the department. This document has been developed for people who exercise specific statutory functions to help them understand their duties, key relationships, tasks and work practices. Schedule 10 of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 regulates statutory functions.

This document will:

- → inform you of what exercising the function involves
- → help mine operators and individuals to develop training and/or mentoring programs to support individuals to practise in the function
- → assist mine operators to develop their safety management system, including management arrangements
- → guide mine operators and individuals when identifying maintenance of competence learning to be undertaken.

Guidance on statutory function

Extract from the NSW WHS (Mines and Petroleum Sites) Regulation 2014, Schedule 10, clause 25:

> (1) The statutory function of mining engineering manager is to develop, supervise, monitor and review the mining engineering standards and procedures forming part of mining operations at the mine.
>
> (2) The requirement for nomination to exercise the statutory function is that the individual nominated must hold a current practising certificate that authorises the exercise of the statutory function.

Exercising the function: an individual exercising the function should:

- **Develop**: establish the mining engineering standards and procedures through appropriate consultation, investigation and analysis methods, with reference to any design principles, engineering and technical standards relevant to legislative requirements, WHS and risk management.
- **Supervise**: provide supervision of mining engineering standards and procedures through the processes of the mine safety management system. This may include but not be limited to a combination of the following methods:
  - Verifying and giving advice on implementation
  - General supervision and to a lesser extent direct supervision, as required
  - Participate in the management of risk, including risk assessment processes and particularly those involving principle hazards
  - Maintaining an understanding of WHS hazards and risks in the mining operations that are required to be controlled or eliminated and applying this knowledge.
- **Monitor:** periodically obtaining data and information to verify whether the mining engineering standards and procedures are being applied and achieving their purpose (i.e. 'fit for purpose') by:
  - analysing reports and information provided by other statutory function holders and consultative mechanisms under the safety management system
  - observing mining operations and verifying compliance with legislation to support a safe and healthy workplace for all mine workers
  - ensuring that mining engineering standards and procedures used in any plans, such as trigger action response plans (TARPs), are relevant and timely
  - verifying mining engineering standards and procedures in principal hazard management plans and principal control plans
  - evaluating audit outcomes on the effectiveness of the safety management system against its mining performance standards and procedures.
- **Review** : measuring the effectiveness of the mining engineering standards and procedures against the performance standards of the safety management system and external good (or best) practice so they remain current, effective and improved where possible. They may rely on other workers and the safety management system processes for review activities to be completed including one or more of the following:
  - Reviewing and evaluating audit results, health and safety performance outcomes, and remedial actions
  - Reviewing risk assessments and controls to ensure they refer to the appropriate standards, where applicable, and control the risks from hazards
  - Considering relevant external information sources such as Original Equipment Manufacturer, Regulator and other safety and health type alerts.

Scope and relationships

Applies to underground mines only, but not underground coal mines.

Relationships

An individual will follow the management structure set out in the mine safety management system.

They should be aware of possibly interacting with other individuals exercising statutory functions at the mine:

- → **Underground mining supervisor** – assist with supervising, monitoring and reviewing mining engineering standards and procedures
- → **Electrical engineer** (only required if total connected power is greater than 1,000 kilowatts or high voltage is utilised) - cooperate with to ensure mining and electrical engineering standards and procedures for mining operations are compatible and effective
- → **Qualified electrical tradesperson** – as above for Electrical Engineer
- → **Mining surveyor** (only required if mine survey plan required) – assist with preparing and signing the mine survey plan for prescribed items.

Statement of minimum tasks

The individual should carry out the following tasks for required elements of the mine's safety management system to develop, supervise, monitor and review mining engineering standards and procedures.

- **Generally**
  - For the applicable elements of the safety management system:
    i. Managing risks;
    ii. Contractors and their management plans.

- **Principal Hazards**
  - Principal hazard management plans for all applicable prescribed principal hazards in NSW WHS (Mines and Petroleum Sites) Regulation 2014, clause 5 and any others

- **Principal Control Plans**
  - Principal control plans as required for mining engineering standards and procedures;
  - Refer to Scope and Relationships for implementation with other statutory function holders.

- **Specific Control Measures (application as prescribed in the WHS laws[1])**
    - Specific control measures that apply to a mine
    - Specific control measures that apply to underground mines
    - Emergency and survey plans.

- **Information, Training, Instruction and Consultation**
    - Supporting information, training and instruction for mining engineering standards and procedures
    - Participating in mine consultation processes internally and externally as directed.

- **Monitoring, Auditing and Review**
    - Monitoring the safety management system against the mining engineering standards and procedures including:
        i. Compliance with the mining engineering standards and procedures for reporting mine incidents to the regulator, including preserving incident sites
    - Conducting or assisting in the audits and reviews of the safety management system, as required.

Key statutory function and mining supervisor

The Mining Engineering Manager is a key statutory function under clause 135 of the WHS (Mines and Petroleum Sites) Regulation 2014. Only one person is nominated by the mine operator in the safety management system to exercise the key statutory function.

This statutory function is a mining supervisor under clause 3 of the WHS (Mines and Petroleum Sites) Regulation 2014 but has no specific additional requirements.

Note

The safety management system forms part of the overall management system that is in place at the mine (NSW WHS (Mines and Petroleum Sites) Regulation 2014, clause 13 (4)). The mine management system may follow a management approach such as:

- Plan, do, check, act;

[1] As per NSW WHS (Mines and Petroleum Sites) Act 2013, referring to WHS Act 2011 and WHS Regulations 2011, and NSW WHS (Mines and Petroleum Sites) Act 2013 and NSW WHS (Mines and Petroleum Sites) Regulation 2014

- Identify, assess, control and review.

Regardless of what management approach is used at the mine, the individual should exercise the statutory function to meet the safety management system and WHS laws requirements.

Work practices

There are no typical work practices across all mining engineering managers at all mines. The individual should develop their work practices according to the requirements specified by the mine operator and the safety management system.

In general, the work practices of a mining engineering manager vary according to the mine and mine operator. In NSW, mines can range from small mining operations operated by an individual or private company and with very few workers to large, complex mines operated by publicly listed companies and with an extensive workforce.

Authority

The WHS (Mines and Petroleum Sites) Regulation 2014 enables the function and an individual to practise in it by:

- → Clause 136: only an individual who meets the requirements can exercise the function and only if they are nominated by the mine operator.
- → Clause 137: the mine operator must ensure the nominated individual continues to meet the requirements and is able to exercise the function.
- → Clause 138: an individual must inform the mine operator if they cannot exercise the function.

Key terms

Term	Definition
Develop	To bring into being or activity, generate or evolve. The term includes further adding to and amending standards and procedures that form part of the safety management system.
Fit for purpose	Something that is sufficient to do the job it was designed to do. This definition is taken from the NSW code of practice: mechanical engineering control plan.
Implement	To put into effect, either directly or through causing others to carry out actions.
Lifecycle	For mining operations, this means the activities for exploration, construction,

	commissioning, extraction and those in connection with it, and the decommissioning of a mine.
Mining operations	For a definition of this term, refer to section 7 of the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*. Mining operations includes lifecycle activities.
Monitor	To check, observe, supervise and/or record the operation of a mine, part of a mine, workers or related activities so as to assess the suitability of mining engineering standards and procedures to manage potential or actual risks.
Review	A retrospective assessment of something with the intention of instituting change if necessary.
Safety management system	All activities planned and documented by the mine operator to be carried out to manage health and safety risks at the mine in an organised manner.
Standards and Procedures	Written internal or external documents that set out or provide guidance on how mining operations should be carried out to achieve a performance level for WHS. This may include mining, electrical, mechanical or other areas. The standards may include: → WHS legislation and codes of practice → international and Australian standards → guidance information from various sources that are credible, current and substantive → industry publications such as WHS reports.
Supervise	Oversee or direct some part of mining operations. The mining engineering manager should normally provide general supervision, but at times may exercise direct supervision, such as to verify critical controls are working or high risk activities are being managed. This could include, for example, commissioning a large new piece of plant.
Direct supervision	Verifying through direct observation that mining operations and any contractors involved are applying the requirement of the safety management system.
General supervision	Where the individual may not always be present or directly responsible for supervising the activities, but will monitor to ensure that the safety management system is implemented, applied and monitored, and provide advice to supervisors and workers.

Underground mine	‘means that part of a mine that is beneath the surface of the earth and includes plant and structures that extend continuously from the surface into that part of the mine but does not include a part of the mine in which high wall mining is being carried out.’ (clause 3 NSW WHS (Mines and Petroleum Sites) Regulation 2014).