1. Who establishes the standards of safety within an organisation?

The duties of the Principal Employer, and any other employer as implemented by senior corporate management, are to develop, authorise, provide and maintain workplace safety and health systems to guide mine management and supervisors on how to run the mine safely.

Corporate managers (e.g. chief executive officer, company directors, corporate advisors) must ensure that sufficient resources, both monetary and human, are available to operate the mine in accordance with the Mines Safety and Inspection Act 1994 and Mines Safety and Inspection Regulations 1995, and the Principal Employer has the power to issue instructions to the manager of the mine.

The systems, standards and leadership style established by corporate management are fundamental in developing an appropriate safety culture.

2. What key management and supervisory personnel are needed to operate a mine in Western Australia?

Before operations begin at a mine, the Principal Employer must appoint a Registered Manager for the mine. The Registered Manager is responsible on a daily basis for the control and supervision of the mine and should reside close enough to the mine to provide effective daily control and supervision.

The Principal Employer must appoint a quarry manager for open pit operations and an underground manager where underground operations take place. The Principal Employer may authorise the Registered Manager in writing to appoint the quarry manager, underground manager, alternate manager and deputy manager positions.

Additional management appointments may be made by the Registered Manager to assist in maintaining compliance with the Act. Where additional appointments are made, the Registered Manager must carry out regular checks to ensure that the appointed persons carry out the delegated duties in accordance with the requirements of the law.

Under the duty of care legislation, supervision must also be provided for all employees carrying out work at the mine.

3. What personnel are required for exploration operations?

The Principal Employer (typically the tenement holder) must appoint an Exploration Manager to take control of exploration activities. Where these activities are associated with a mine, the Registered Manager of that mine may be appointed as the Exploration Manager.

As for a Registered Manager, the Exploration Manager must ensure compliance with the Mines Safety and Inspection Act 1994 and accompanying regulations.

For each field exploration operation, the tenement owner must also appoint a person who is responsible for the daily site management of activities at that operation. This position may be filled by the Exploration Manager if that person is on site managing the field exploration activities.

Key management appointments specified in regulations include an electrical supervisor, mine surveyor, high voltage operator, ventilation officer, radiation safety officer and a person responsible for the general control of any construction work at the mine.
4. What qualifications are required for a Registered Manager?

There is no statutory qualification prescribed for Registered Managers. However, they need to be trained and assessed as competent to carry out the work. As a minimum, the Registered Manager should be conversant with the Mines Safety and Inspection Act 1994 and accompanying regulations, the risk management approach and the hazards relevant to the operation, and have management and leadership skills.

5. What statutory qualifications are required for an underground manager?

For a mine employing 25 or more people underground, the manager must hold a First Class Mine Manager’s Certificate.

For a mine employing fewer than 25 underground, the manager may be the holder of an Underground Supervisor’s Certificate.

6. What statutory qualifications are required for an underground supervisor?

To be an underground supervisor (i.e. shift boss), the person must hold an Underground Supervisor’s Certificate (i.e. shift boss’s ticket).

7. How many underground supervisors are required for an underground mine?

The number will depend on the level of risk, size and nature of the mine and the number of shifts worked in a day.

8. What statutory qualifications are required for a quarry manager?

For a quarry employing 25 or more people where explosives are used, the manager must hold a First Class Quarry Manager’s or an unrestricted Quarry Manager’s Certificate. Where no explosives are used, a Restricted Quarry Manager’s Certificate is acceptable.

For a quarry employing fewer than 25, the manager must hold a First Class Manager’s, an unrestricted Quarry Manager’s or a Restricted Quarry Manager’s Certificate. For a quarry not using explosives, the Restricted Quarry Manager’s Certificate may be annotated “Only for non-explosive quarries”.

9. What qualification is required for surface supervisors?

There is no specific qualification defined for a surface supervisor.

Where a statutory qualification is not required, the supervisor is required to be competent to carry out the task. A competent person is defined in section 4 of the Mines Safety and Inspection Act 1994 as a person who is appointed or designated by the employer to perform specified duties based on knowledge, training and experience.

10. May a mine be operated without the appointed key management persons?

No. In a commute schedule, alternate managers need to be appointed for the three key positions when the duty holders are rostered off.

In a residential situation, when a Registered Manager is expected to be absent for more than a day for any reason, other than being rostered off, a deputy manager needs to be appointed.

When a quarry manager or underground manager is expected to be absent for any reason, other than being rostered off, a deputy manager needs to be appointed.

The intent is that on any working day, these personnel are present to provide control and supervision at the mine site.

An accurate log of the periods of duty for each manager including the date, time and reasons for the absence needs to be kept in the mine record book.

11. What are the management requirements for the inspection of workplaces?

The Registered Manager must ensure that each workplace at the mine is inspected at the prescribed intervals specified in the law. The regulations stipulate the minimum frequency of inspections required for certain areas.

For a quarry operation, at least one inspection in each working shift is required to be completed by the quarry manager or the appointed competent person.

For underground non-coal operations, at least one inspection in each working shift is required to be completed by a person with a First Class Mine Manager’s Certificate or an Underground Supervisor’s Certificate. The underground manager may direct that more frequent inspections are required.

For all other workplaces, at least one inspection is required during each working day.

12. May an employee carry out work without supervision?

No. The relevant employers must provide information, instruction, training and supervision to enable employees to work in such a manner that, as far as practicable, they are not exposed to hazards.

Under the employees’ duty of care, they must comply with the employer’s procedures and instructions, ensure their own safety, and avoid endangering any other persons by their actions or omissions.

13. What level of supervision is required for work being carried out at the mine?

The level of supervision depends on the state of knowledge, qualifications, experience and training of employees, as well as the nature of the task and associated hazards.

Untrained employees should be under the close personal supervision of a competent person until they are trained and assessed as competent in the work being carried out.
Where employees have been trained and assessed as competent in dedicated safe work procedures, the employee may carry out the work without close personal supervision. However, the supervisor should oversee compliance with the procedures through task observation or other regular contact throughout the shift as required.

Where the work cannot be carried out in accordance with the procedures or a hazardous situation or occurrence occurs, the supervisor and manager must be immediately notified so that they can take control of the situation.

Where a task is ever changing and has a high risk potential, the manager or supervisor should be aware of the situation and be present on the job at the time the high risk work is being undertaken. Their primary role will be to assess the risk, issue clear safety instructions, protect employees from danger or injury and ensure the work is carried out safely.

14. What considerations must both the manager and a supervisor make while allocating a task for its safe execution?

The details will vary depending on the complexity of the task but some general points to consider are listed below.

- Explain the task in sufficient details and check if the personnel involved have understood it.
- Ensure there is a sufficient number of people to do the task.
- Allocate personnel who are competent to do the job. Where necessary, they must hold the statutory licence or certificate to undertake the job.
- Allocate sufficient time to complete the task.
- Provide resources (e.g. space, equipment, tools, substances) that are suitable for the task.
- Consider environmental factors (e.g. light, wind, noise, dust, rain, contaminants) and adjoining activities as these conditions may change.
- Carry out a risk assessment to identify the hazards and unwanted events, determine the risks and establish the controls. The type and extent of risk assessment will depend on the nature of the task. The task is only undertaken if the control measures are adequate, implemented and maintained.
- Assess and provide additional assistance if required for some aspects of the task.
- Determine the level of supervision required and whether the task can be carried out safely until the next inspection.
- For an incomplete task from a previous shift, explain the correct status. Review and revise the original risk assessment if necessary.
- Develop and provide written procedures for non-routine tasks.
- Provide ongoing instructions to deal with changing conditions.

15. What are the best safety controls that management and supervisors can use to provide and maintain safe workplaces, plant and systems of work?

The Mines Safety and Inspection Act 1994 and accompanying regulations provide a framework to guide management and supervisors through their safety obligations.

The fundamental requirements are clearly summarised under the objects of the Act, which are contained in section 3. A primary aim of the legislation contained in section 3(1)(c) is to eliminate risks or provide and impose effective controls.

Where the risks cannot be eliminated, effective controls need to be developed and used. Management and supervisors should apply the hierarchy of control and strive to adopt higher order control measures rather than rely on administrative controls such as rules and procedures.

For controls to be effective, they also have to address and manage the potential for human error. Involving those undertaking the task in the risk assessment process will help the site ensure that hazards are recognised, understood and implemented.