



Frequently asked questions on electrical supervision in Western Australian mining operations

1. What legislation applies to electrical installations on mining operations?

Electrical installations on mining operations in Western Australia must meet the requirements of the:

- *Electricity Act 1945*
- Electricity Regulations 1947
- Electricity (Licensing) Regulations 1991
- *Mines Safety and Inspection Act 1994* (MSIA)
- Mines Safety and Inspection Regulations 1995 (MSIR)

2. Must an electrical supervisor be appointed to a mining operation?

Yes. An electrical supervisor must be appointed to a mine site in accordance with MSIR r. 5.10.

Electrical supervisors play an important role within a mining operation. They are not only responsible to the manager of the mine for electrical safety but are also responsible for meeting electrical regulatory obligations to both the Resources Safety Division in the Department of Mines and Petroleum and Energy Safety in the Department of Commerce.

Consequently, an electrical supervisor should be in a position to understand and be able to apply relevant legislation and standards as well as codes of practice, guidelines, industry agreements and company standards that may apply.

3. Does more than one electrical supervisor need to be appointed for a large mining operation?

Regulation 5.10(1) of the MSIR requires the principal employer at, and the manager of, a mine to appoint, in writing, sufficient electrical supervisors to:

- ensure the efficient supervision of the installation, maintenance and testing of electrical equipment in the area of their responsibility
- be responsible to the manager for the electrical equipment at the mine.

Note: Manager is defined in the MSIA as the Registered Manager.

Sufficient electrical supervisors must be appointed based on the area of their responsibility that can be practicably or reasonably managed. The appointments should also consider periods of absence from site for annual and long-service leave, training, sickness, temporary transfer and other reasons.

4. Does the electrical supervisor need to be an employee?

No. The supervisor does not have to be a direct employee. A contractor can be appointed as the electrical supervisor.

5. Does the electrical supervisor need to remain on site?

No. The supervisor does not need to be on site full time, provided visits are made with sufficient regularity to ensure compliance with MSIR r. 5.11.

6. Are statutory records required to be maintained?

Yes. The manager must ensure the following statutory positions are recorded in the mine record book:

- the appointment of an electrical supervisor or revocation of any such appointment including the electrical supervisor's area of responsibility [MSIR r. 5.10]
- the appointment of high voltage operators for the isolation of any high voltage equipment at the mine for access, maintenance or repair purposes [MSIR r. 5.18(1)].

To help meet the requirements of MSIR r. 5.10(1), it is recommended that the manager and electrical supervisor meet at least monthly so that:

- any electrical issues that might affect the safe operation and maintenance of electrical equipment at the mine can be discussed
- the manager can sign the electrical log book.

7. What are the duties of an electrical supervisor?

The electrical supervisor's duties are detailed in MSIR r. 5.11 and include those listed below.

- Ensuring all work carried out in relation to electrical equipment and installations in their area of responsibility is adequately supervised. This includes electrical staff, contractors and labour hire employees.
- Ensuring electrical equipment or installations in their area of responsibility are installed and tested in accordance with the MSIR and maintained in a safe working condition.
- Ensuring electrical installations and equipment are in accordance with Australian Standard AS/NZS 3000 *Electrical installations* (also known as the Australian/New Zealand Wiring Rules).
- Stopping the installation or use of any electrical equipment in their area of responsibility considered to be dangerous, and reporting to the manager any situation that may affect the safe use of electricity or contravene the MSIR.
- Ensuring the electrical nominee or electrical contractor has reviewed and inspected uncertified installations, and signed the electrical log book entries on a regular basis.
- Investigating, recording in the electrical log book and reporting to the manager
 - any electrical shock or burn received by a person
 - any fire suspected to be caused by electricity
 - any dangerous occurrence involving electricity that could have caused injury to a person.

8. Is an electrical supervisor the same as a nominee?

No. Appointing an electrical supervisor is not the same as nominating someone for an In-House Electrical Installing Work Licence. These are separate appointments made under different legislation:

- the supervisor is appointed in accordance with MSIR r. 5.10
- the nominee is appointed in accordance with Electricity (Licensing) Regulations 1991 r. 37.

Note: It may be useful and convenient for both appointments to be held by the same electrical supervisor.

9. What are the duties of an electrical supervisor with regards to maintenance of electrical equipment?

The electrical supervisor's duties for maintaining electrical equipment are detailed in MSIR r. 5.27 and include those listed below.

- Ensuring maintenance systems are in place in their area of responsibility so that electrical equipment and installations are maintained in a safe working order. Electrical supervisors must continually monitor the maintenance system to ensure it remains up-to-date.
- The contractor must enter the work in Section 1 of the area electrical log book and have it certified by the nominee [MSIR r. 5.14].
- Ensuring each entry made in the electrical log book contains all details required by the Electricity (Licensing) Regulations 1991, including the name(s) of electrical worker(s), the contractor(s) that performed the work, and the date on which the work was completed.

- Ensuring the in-house licence nominee or electrical contractor certifies all entries in the electrical log book relating to new installations, alterations and additions to existing installations, including when electrical installation works are removed or made redundant.
- Ensuring that all electrical installing work is inspected and tested in accordance with MSIR r. 5.3.

10. Should all electrical incidents be reported?

Yes. Any incident or dangerous occurrence involving electricity must be notified to EnergySafety [Electricity (Licensing) Regulations r. 63] and the District Inspector [MSIA s. 78(1)] in the first instance before starting an investigation.

It is also prudent to contact the Department of Mines and Petroleum's Inspector of Mines (Electrical) responsible for the mining operation so the mines inspector has an understanding of the incident before the notification is sent through the online Safety Reporting System (SRS). For incidents not considered serious, this contact should be made during normal working hours.

The electrical supervisor must ensure that all incidents are reported, investigated and recorded according to legislative requirements and the manager advised. The electrical supervisor is required to:

- ensure an entry is made in the mine record book and electrical log book for all such incidents [MSIR r. 5.11]
- maintain the electrical log book and record in it all information required under Part 5 [MSIR r. 5.11]
- regularly liaise with the manager on the status of all statutory matters within their area of responsibility.

Comprehensive work safety and health information provided by the Department of Mines and Petroleum can be found at:

www.dmp.wa.gov.au/ResourcesSafety

Issued 16 April 2015