June 2021

The Resources Regulator is commencing a program of planned inspections and targeted assessments at metalliferous mines (surface and underground) and tier 1 quarries, which will be focussing on the assessment of critical controls within electrical infrastructure which are intended to manage the risk of fire and explosion.

Fires and explosions have the potential to cause serious and/or fatal injuries to workers. This fact sheet identifies what are considered as the critical controls for electrical risks within the metalliferous and tier 1 quarry mining environments. The below information should be considered by mine operators when assessing the risk at their operation.

**Electrical Protection**

*Electrical protection detects and disconnects overloaded or faulty electrical equipment*

**Lightning protective earthing**

*Lightning energy is controlled with an effective earthing system*
Equipment suitable for the environment

Management of diesel or electric powered plant with respect to the environment in which it is installed

Considerations

Investigations into fire or explosion incidents involving electrical installations have identified that the absence or degradation of these critical controls have contributed to incident outcomes. When identifying and implementing control measures, mines are also reminded to follow the hierarchy of controls to ensure health and safety risks are minimised so far as is reasonably practicable.

Other relevant safety alerts and bulletins published by the NSW Resources Regulator:

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<td>25 May 2020</td>
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