

# FACT SHEET

## Planned Inspection Program - Fire or explosion electrical - Underground coal operations

November 2020



The principal mining hazard of fire or explosion can potentially cause serious or fatal injuries to workers if not controlled effectively. The identification and implementation of critical controls for electrical risks within the underground coal mining environment is a key consideration in managing the risk of fire and explosion and must be considered by mine operators when assessing risk at their operation.

The NSW Resources Regulator is commencing a program of planned inspections and targeted assessments across the underground coal mining industry in NSW which will be focussing on the critical controls identified below and ensuring compliance with the applicable regulatory requirements.



### Electrical protection

Electrical protection detects and disconnects overloaded or faulty electrical equipment.



### Equipment suitable for the atmosphere

Management of diesel or electric powered plant prevents ignition of explosive atmosphere.



### Lightning protective earthing

Lightning energy is diverted away from underground parts of the mine.

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### Remove conductive pathway to fuel

Lightning energy is separated from underground fuel sources.

## Considerations

Mines should consider the above criteria as a minimum and ensure that such information is included within their respective principal hazard management plans and associated documentation. Following investigations into fire or explosion incidents which have an electrical focus, it is evident that non-compliance to these key control measures have contributed to incident outcomes, which has caused both severe and fatal injuries to workers. 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

DATE PUBLISHED	REFERENCE	TITLE
09 Oct 2020	SA20-10	<a href="#">Anti-static materials in underground coal mines</a>
15 Aug 2018	SB18-13	<a href="#">Alternators and IS equipment</a>

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