



SAFETY BULLETIN

Electric shocks

BACKGROUND

The number of electric shocks at voltages above 50 volts AC at underground coal operations has risen during the past three years. The Maximum Reasonable Consequence of contact with electricity above 50 volts AC is **death of at least one person**. (This is clearly demonstrated by figure 14 in *AS 60479.1 Effects of current on human beings and livestock - General aspects*).

It is unacceptable that workers receive electric shocks while going about their normal duties. The engineering risk controls for preventing electric shocks are well known and they are supported by well-known procedural risk controls and requirements that only electrically qualified people work on electrical equipment and installations. If all of these are implemented and well managed, electric shocks should be prevented.

When a person receives an electric shock it indicates that there are systemic failures in the management of electrical engineering safety.

RECOMMENDATIONS

- Coal operators should review their mine site risk assessments and ensure that electrical energy has been identified as a hazard.
- Coal operators should review their Mine Health and Safety Management System to ensure that it provides for the prevention of electric shock.
- Coal operators should review the adequacy and reliability of the risk controls that are implemented for preventing electric shock.
- Coal operators should review their management structure to ensure there is sufficient electrical engineering supervision to manage programs for the prevention of electric shock.

NOTE: Please ensure all relevant people in your organisation receive a copy of this Safety Bulletin, and are informed of its content and recommendations. This Safety Bulletin should be processed in a systematic manner through the mine's information and communication process and placed on the mine's notice board.

Signed

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