

Safety and Health, Mines Inspectorate Brisbane - Head Office

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Vision: Our Industries Free of Safety and Health Incidents

# **Directive**

I John Kabel, an Inspector appointed under Section 125, of the Coal Mining Safety and Health Act 1999 issue a Directive to reduce risk, pursuant to 166 of the Coal Mining Safety and Health Act 1999.

Subject: Electrical Equipment	
File No.:	
Mine Name:	
Mine Operator:	

Mines Inspectorate Activity: Inspection	Activity Dates: 30/11/2005	
Record Date: 20/12/2005 4:19:35 PM	MRE Item No.: 1	

**Title: Flameproof Diesel Vehicles Electrical Circuits.** 

### Observation:

The design, installation and maintenance of electrical circuits on mobile diesel machinery at an underground coal mine must provide for reliable circuit interruption under fault conditions. In recent incidents however, electric faults due to damage to electric lighting cables on explosion protected diesel machines have proven difficult to isolate. Regimes of increased inspection and improved mechanical protection have not prevented further incidents occurring.

Additional protection in the form of enhanced over-current and earth fault protection is required to provide reliable circuit interruption under fault conditions, including where fault current and load current are difficult to distinguish between. Alternator based protection systems incorporating this type of fault protection are now being manufactured and have been proven in service.

# **Directive Given:**

I direct that enhanced over-current and earth fault protection devices are installed on flameproof diesel vehicles electrical circuits to provide reliable circuit interruption under fault conditions, including where fault current and load current are difficult to distinguish between.

### References:

Coal Mining Safety and Health Act 1999 Section 166

Coal Mining Safety and Health Regulation 2001 Sections 23, 29

A person to whom a directive is given must comply with the directive as soon as reasonably practicable. Risk to a person resulting from a hazard at the mine must be within acceptable limits at all times.

Reasonable Time for Compliance – Due Date: 1/07/2006

Completion Date:

Reassigned Due Date:, by, on

### Directive -

If an inspector or inspection officer reasonably believes a risk from coal mining operations may reach an unacceptable level, the inspector or officer may give a directive to any person to take stated corrective or preventative action to prevent the risk reaching an unacceptable level.

The directive may be given orally or by notice.

If the directive is given orally, the person giving the directive must confirm the directive by notice to the person in control of the mine or part of the mine to affected by the directive and to the relevant site senior executive.

Failure to comply with subsection (3) does not affect the validity of the directive.

# Method of Giving Directive -

This directive in writing on 30/11/2005 at 5:00:00 PM

Note: For directives given orally - List the name of all persons the directive is given to, or all classes of person at the mine the directive is given to.

### Directive Given To -

This directive is given to the operator of the mine.

### Method of identification Used -

In issuing this directive I identified myself as a person appointed under Section 125 of the Coal Mining Safety and Health Act 1999.

I will produce my identity card for the other person's inspection at the first reasonable opportunity (it not being practicable to produce or display the identity card at the time of exercising the power).

### Part of mine affected by directive -

Whole of Mine

# A copy of the directive was given to -

A copy of this directive or notice was given to the person in charge of mine or the part of the mine affected by the directive on 30/11/2005 at 05:00:00 PM.

The person in charge of the mine or the part of the mine affected by the directive has confirmed that they were the person in charge of the mine or part of the mine affected by the directive on the day and time it was issued.

A copy of this directive or notice was given to site senior executive on 30/11/2005 at 05:00:00 PM.

In giving this	directive I re	easonably believ	e that a risk fron	n operations	may reach an
unacceptable	e level.				

The reason for my belief or suspicion is based upon the following -

Recent incidents have shown that electric faults from damaged electric lighting cables on explosion protected diesel machines are difficult to reliably isolate, and could have produced arcs and sparking on a machine in an underground coal mine. Regimes of increased inspection and improved mechanical protection have not prevented further incidents occurring. Additional protection in the form of enhanced over-current and earth fault protection is required to provide reliable circuit interruption under fault conditions, including where fault current and load current are difficult to distinguish between.

John Kabel:	Date Issued://
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Warning - Failure to comply with this directive is an offence. If you disagree with this directive, you may apply for a review of the directive. A summary of the review provisions is provided below.