

Safety and Health, Mines Inspectorate Brisbane - Head Office

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Vision: Our Industries Free of Safety and Health Incidents

Directive

I David Mackie, 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: Use of polyurethane foam to flatproof tyres used in underground coal mines		
File No.:		
Mine Name:		
Mine Operator:		

Mines Inspectorate Activity: Investigation	Activity Dates: 11/11/2005
Record Date: 20/12/2005 1:57:27 PM	MRE Item No.: 1

Title: Polyurethane foam in tyres of vehicles used in underground coal mines

Observation:

Tests are required to determine the flammability of this material and the fumes that are given off as the temperature of the material rises as the vehicles are used.

Directive Given:

I require that action the taken to:

Ensure that the "flatproofing " of tyres used on underground vehicles is undertaken by competent people who have been trained by the distributor of the produce and who have the knowledge and equipment to carry out this work in accordance with the manufacturers instructions.

Ensure that no welding, cutting or heating takes place on or adjacent to tyres that have been "flatproofed".

Determine the maximum temperature reached by "flatproofed" tyres on vehicles undertaking the heaviest tasks normally undertaken by these vehicles. It is appreciated that this will in many cases be during a longwall move. In such circumstances the measurement of the temperatures for other applications should be taken and forwarded to the writer and temperatures associated with longwall moves taken as soon as the opportunity arises.

Take any other appropriate steps to ensure that the product does not create an unacceptable risk when used underground.

References:

Coal Mining Safety and Health Act 1999

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: 29/11/2005

Completion Date: 29/11/2005

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 15/11/2005 at 2:45:00 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 identiifed 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 15/11/2005 at 03:15:00 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 15/12/2005 at 04:00:00 PM.

In giving this directive I reasonably believe that a risk from operations may reach an unacceptable level.

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

There have been a number of heatings of polyurethane in tyres which have been attributed to improper filling.

The polyurethane in other applications in mines has been involved in discharging high levels of toxic gases. However it is appreciated that in these case a much greater mass of polyurethane was involved.

Previous limited tests carried out on the polyurethane used to "flatproof" tyres failed a fire test use by the NSW inspectorate for approving polyurethane used in the mine for other purposes. This test while not directly applicable to the present application raises concerns about the flammability of the product used.

A number of tests are being organised to determine the mass and the identity of fumes given off by the "flatproofing" product as its temperature increases from room temperature to ignition temperature. Until these tests are completed it is appropriate that care be taken in the use of this product.

David Mackie:// Date Issued:/	David Mackie:	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.