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Preventing fires on mobile plant: responding to safety alerts

This safety bulletin provides safety advice for the NSW mining industry.

This safety bulletin should be read in conjunction with [Discussion paper: Preventing fires on mobile plant August 2018](#)

Issue

Original equipment manufacturers (OEMs) of mobile plant regularly issue safety alerts and technical bulletins to customers. These alerts and bulletins may require immediate action to reduce the potential for fires, which could include rerouting hoses, fitting heat shields, upgrading equipment and updating maintenance procedures.

Mine operators may not have processes in place to implement recommendations from OEMs within the timeframe recommended in safety alerts and technical bulletins.

Investigations into one serious fire recently identified that a safety bulletin requiring immediate attention to mitigate a known fire risk had not been implemented on a truck at the underground metalliferous mine some six months after it was issued. The machine subsequently caught fire and was destroyed. The cause of the fire was under investigation at the time of writing and although it may not be related to the topic of the safety bulletin, the continued operation of a machine for six months with a known fire risk is unacceptable.

Photo 1: Burned out truck in metalliferous mine decline. Photograph by NSW Resources Regulator.



Investigation

After an incident in which a 60 tonne haul truck was destroyed by fire, a review of the truck and of safety bulletins from OEMs was undertaken by the Resources Regulator. This review identified multiple potential causes of the fire or contributing causes including:

- cooler fan motor hoses not upgraded
- coolant hose rerouting not completed
- clogged exhaust pipe
- improvements to fuel line routing and support not completed
- heat shields potentially damaging oil lines
- firewall and hose protection improvements not completed
- additional cover not added to right hand side fuel tank
- improved fuel line material not used
- damaged fuel tank
- overpressure in fuel tank.

Note: investigations have not yet established the cause of the fire at the time of writing.

Some of the improvements and modifications may have been covered by OEM warranties if they had been completed within a specified timeframe.

Inspections of other haul trucks at the same mine found that many of the improvements and modifications had been completed. However, there were several cases where the recommendations had not been acted on, or it was shown that the maintenance of the improvements and modifications had not been kept up to an appropriate standard.

Recommendations

To reduce the risk of mobile plant fires to as low as is reasonably practicable, mine operators should:

- ensure they have access to OEM and industry safety alerts and safety bulletins
- act on those alerts and bulletins and liaise with the OEM to update their mobile plant with the latest improvements and modifications, either immediately or within the timeframe specified
- include the maintenance of those improvements and modifications in their safety management system.

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. It should also be placed on the mine's notice board.

Go to resourcesandenergy.nsw.gov.au/safety to:

- find more safety alerts and bulletins
- use our searchable safety database
- sign-up to receive mine safety news.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (April 2018). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the NSW Department of Planning and Environment or the user's independent advisor.

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