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Mines Safety Significant Incident Report No. 140

Service truck tyre failure

Incident

Recently, a fitter in a park-up area escaped with minor injuries when a service truck tyre burst two to three metres away. The fitter noticed smoke coming from a wheel and had alighted from the service truck to investigate what he suspected to be a dragging brake. Believing the S-cam brake was jammed, he hit it with a hammer. He stepped back to reassess the situation, knowing the tyre was hot and the S-cam was not jammed. The tyre on the truck then burst, with the resulting air-blast lifting rocks and grit off the ground, striking him. Fortunately, he only sustained abrasion injuries. The injuries could have been worse had the fitter been closer or not wearing correct personal protective equipment (PPE).

Causes

- On investigation it was found that the truck was driven with the park brake at least partially applied and the brakes were out of adjustment.
- Also, there was a lack of adequate knowledge by site personnel of the risks associated with being close to overheated truck tyres and the potential for a sudden release of energy.

Recommendations

To prevent situations similar to the above, management must ensure that:

- brakes are regularly tested and maintained within manufactures recommended tolerances;
- tyre inspections are carried out daily by competent employees to identify and monitor defects and wear;
- tyre rotation and discard criteria are developed in accordance with manufacturer's recommendations;
- employees are made aware of the potential for tyre rupture due to wear, spillage, overheating and poor operating techniques — this should be addressed in operator training;
- an exclusion zone of at least 300 m is established for a 24-hour period if it is suspected that a tyre may rupture; and
- employees wear appropriate PPE, especially when equipment is operating in their vicinity.

Information relating to similar incidents is given in Significant Incident Report Nos 122 and 130.

The Resources Safety publication *Guideline* — *tyre safety, fires and explosions* contains guidance on avoiding or minimising hazards associated with tyres.

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