

SAFETY ALERT



VEHICLE BRAKE FAILURE WHILE TRAVELLING IN A DECLINE

INCIDENT

While travelling down a decline in a metalliferous mine, the brakes failed on a contractor's concrete agitator truck, and the truck was not able to be controlled until it reached a level section of drive.

CIRCUMSTANCES

A contractor's concrete truck was being escorted underground via a decline by another light vehicle. During the first run down the decline the truck was driven in 6th gear. Afterwards the driver stated that the brakes were "a little bit doughy". On the second run down, the driver chose 5th gear so that he did not have to apply the brakes so much. However, the brakes gradually faded, to the point where the driver could not slow the truck down. The driver was unfamiliar with the radio and could not call the escort vehicle driver to tell him what was happening. The driver of the escort vehicle realised the truck was too close and accelerated to provide more room. Once the truck reached a level drive it was brought under control.

INVESTIGATION

- (1) The truck's brakes were tested and the only deficiency was that the truck's brake drums and shoes had been exposed to a massive build up of heat, most likely caused by repeated application during the downward travel of the truck. Expansion of the drums rendered the brake circuit inoperable.
- (2) The truck driver held the correct HR Licence (an RTA heavy vehicle licence), but had limited experience in driving a heavy vehicle on steep grades.
- (3) If the truck were driven in 3rd gear in the decline, it would have eliminated the need to use the brakes.
- (4) Even though the truck driver was provided with a hand held radio and was inducted at the mine, he did not use the 'transmit' button when he tried to make a call during the emergency, and so was not heard by the escort vehicle driver when he tried to alert him.

RECOMMENDATION(S)

- (1) Prior to working in a mine, all contractors should undergo a range of inductions and tests which highlight the particular activities of their jobs.
- (2) A copy should be obtained of all contractors' licences which are relevant to the job, and a copy of the extent of their experience in the job should be made.
- (3) Any doubt about the contractor's competence may require closer supervision and determining specific procedures to minimize risk.
- (4) Maximum grade for the decline, and its length, should be displayed in a conspicuous manner at the start of the descent.

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