Mines Safety Bulletin No. 101

Subject: Trucks moving off while fitters working underneath

Date: 6 December 2012

Summary of hazard

Over the past 18 months, three open-pit incidents have been reported where a truck has been driven off while a fitter was carrying out work beneath it. Although the fitters were not injured, there was significant potential for serious or fatal injuries. The incidents are summarised below.

- A fitter was assigned to turn on the heater valves under a dump truck in the evening. The fitter approached the truck from the driver’s offside and used his torch to signal the driver, who was sitting in the cabin with the engine running. The driver did not notice the fitter and drove off while the fitter was still under the vehicle. The fitter moved to the centre of the truck and was on his hands and knees as the chassis passed over him.

- A water cart broke down in the middle of the night. A serviceman filled the transmission system with oil and left as two fitters were checking for leaks. The fitters placed commissioning tags on the main isolation point and instructed the driver to collect his belongings from the truck. This instruction was misunderstood. As the fitters were inspecting the underside of the truck, they heard the truck’s gears being engaged and realised it was about to drive off. They quickly moved from under the truck as it drove away.

- At the start of the day shift, a fitter had placed a “restricted operations” tag on the main isolation point of a truck after the driver had completed his pre-start checks. The fitter commenced his inspection and asked the driver to go to the cabin and turn on the engine as the wheels needed to be turned. As the fitter continued to work under the truck, a light vehicle that was parked in front of the truck left the area. Assuming it was being driven by the fitter, the driver started to move his truck. The fitter went to the centre of the truck as it passed over him.

Contributory factors

- The truck drivers were unaware that fitters were under their trucks before moving off.

- Incorrect use or failure to use appropriate tags has contributed to each of these incidents. The truck drivers and fitters did not follow correct procedures relating to isolation and tagging. This included not placing tags at isolation and control points, not checking isolation points for tags, and the driver being in the cabin during repairs.

- The communication practices between the drivers and fitters were poor and incorrect assumptions made by both parties.

- The systems of work were inadequate to ensure workers were clear of the area before trucks were driven off. Wheel chocks were not used in any of the incidents. In one of the incidents, the horn was not sounded before the truck moved off.

- Two of the incidents occurred at night when visibility was limited.
Recommendations

- Companies should review their systems of work for the maintenance of trucks at mining operations to ensure they cover work on live equipment and working at night.

- Before anyone works under a truck in an open-pit setting, the driver should exit the truck cabin and the truck should be isolated. Appropriate tags and personal locks should be installed at the truck’s main isolation point (near bottom of access stairway).

- Restricted operations or exclusive control procedures and tags are required where trucks are left running for live work (e.g. fault finding to initiate repairs). This includes the installation of tags on the main control point (e.g. steering wheel). A restricted operations task controller may be used to control access to the truck being repaired and its hazard footprint. During repairs, workers such as fitters and truck drivers would operate under the authority of this controller.

- To improve communication and ensure the area is clear before trucks are driven off, the use of spotters or hand-held radios should be considered.

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