Safety bulletin

DATE: MARCH 2019

Rise in vehicle collisions raises concerns

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

Issue

The NSW Resources Regulator has observed a rise in the reported number of incidents occurring at underground metalliferous mines involving vehicles. Occupants of the vehicles have been placed at risk of serious injury. The incidents occurred in a range of different circumstances.

Incident 1:

A collision occurred between a light vehicle and an underground haul truck. As the haul truck was leaving a stockpile, the tray hit a wall. The operator reversed the haul truck to move away from the wall. A supervisor driving a light vehicle saw the haul truck and assumed the haul truck driver was reversing to allow the light vehicle to pass. The light vehicle was on the blind side of the haul truck. As the light vehicle started passing the truck, the truck moved and hit the passenger side of the light vehicle. The light vehicle operator called the haul truck on the radio to stop him. There was no radio communication between the truck and light vehicle before the collision. The passenger side window was shattered, and passenger side panels were pushed in and torn. No workers were injured.

Figure 1: Haul truck hits light vehicle (IncNot0033382). Photo by NSW Resources Regulator





Incident 2:

A contractor's light vehicle hit a decline wall. The vehicle had been serviced earlier that day by a third-party contractor. As the vehicle was descending the decline, the driver applied the brakes.

The vehicle then turned hard into the wall with enough force to deploy the air bags. A steering failure was identified during the post incident inspection.

The driver and passenger were not injured.

Figure 2: Heavy contact with decline wall (IncNot0033889). Photo by NSW Resources Regulator



Incident 3:

A haul truck was descending a decline. A stores truck had reversed to give way to another truck and started climbing the decline. As the haul truck started to travel around a blind corner, the rigid truck exited the corner. The haul truck hit the rigid truck and pushed it two metres into the decline wall.

Figure 3: Haul truck hits light vehicle (IncNot0033899). Photo by NSW Resources Regulator





Incident 4:

A light vehicle was descending a decline and hit the wall. The vehicle was severely damaged. The driver and passenger escaped injury. The driver then drove the vehicle to a nearby cutting and parked up. An investigation identified that wet road conditions and excessive speed contributed to the collision. A faulty speed limiter and faulty speedometer were identified during the investigation.

Figure 4: Haul truck hits light vehicle (IncNot0033912). Photo by NSW Resources Regulator



Investigation

Contributing factors identified across the incidents include:

- → One of the mines had failed to adequately implement positive communication requirements to control the risk of the collision.
- → Positive communications requirements were not followed because of high radio traffic.
- → Poor quality of maintenance activities affected safety critical systems.
- → Operators failed to drive to conditions.
- → Defects were identified and not communicated to other vehicle operators.
- → Defects were identified, were not repaired and the vehicle remained in service.



Recommendations

It is recommended that all mine operators should:

- 1. review the effectiveness of their positive communication systems. Operators should review <u>SB18-06 Lack of Positive communication</u>.
- 2. apply the hierarchy of controls to vehicle interactions. This includes assessing collision avoidance systems, block lighting systems and positive communications requirements.
- 3. review road watering practices to avoid creating hazards. This should include road material, operator and water cart training and the use of dust suppressants.
- review light vehicle standards, maintenance requirements and vehicle inspections. This should include reviewing the relevant sections of <u>MDG 15 Guideline for mobile and transportable plant</u> for use at mines 2017.
- 5. communicate the requirements of the transport management plan to all workers operating mobile plant at the mine.

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 resourcesregulator.nsw.gov.au to:

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (March 2019). 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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