

Safety Alert

Date: May 2025

Near miss between light vehicle and front-end loader

The hazards of operator distractions in open cut mines were highlighted when a light vehicle operator had to take evasive action to prevent a collision with a front-end loader.

Circumstances

A front-end loader was travelling up a ramp approaching an intersection at about 10 km/h. The operator failed to identify a light vehicle with 2 occupants waiting to turn right at the intersection ahead of the loader.

As the loader approached the light vehicle from behind, the light vehicle operator became aware that the loader was about 10 – 15 m away and still travelling forwards. The light vehicle operator took evasive action, moving forward and left onto the haul road. This narrowly avoided the light vehicle being crushed by the loader, which could have resulted in serious injury or fatality to the light vehicle occupants.

The loader operator was unaware that the light vehicle was in its travel path and failed to stop, continuing through the intersection. It was not until the loader operator was contacted via the two-way that they became aware of the near miss event.

Figure 1: Incident re-enactment photo



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Figure 2: Incident re-enactment photo



Investigation

- The light vehicle was found to be fitted with a flag and an operational flashing light.
- A re-enactment of the incident was completed.
- An Incident Cause Analysis Method (ICAM) based Investigation was completed.
- While approaching the intersection, the loader operator was distracted by using the two-way radio.
- The loader operator's visibility was restricted due to the position of the loader bucket.

Recommendations

- Equipment operators must maintain situational awareness at all times while operating mobile equipment and ensure that distractions do not interfere with safe operations
- Mine operators must have a structured, risk assessed approach to address adverse vehicle interactions and should review and consider all relevant resources available, including NSW Resources Regulator guidance material
- Sites are to investigate and where reasonably practicable implement light vehicle separation roadways and collision avoidance technologies
- Sites must include human and organisational factors in their vehicle interaction risk assessments.
- Defective equipment must be reported and not operated if the defect prohibits the safe operation of the equipment.

Note: Please ensure all relevant people in your organisation receive a copy of this safety alert and are informed of its content and recommendations. This safety alert should be processed in a

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systematic manner through the mine’s information and communication process. It should also be placed on the mine’s common area, such as your notice board where appropriate.

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