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# Worker sustains critical injuries after driving loader over stope edge

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

### Issue

A worker has sustained critical injuries after inadvertently driving his Caterpillar R2900 LHD off the edge of a stope and falling 20 metres to the level below. The dirt bund has been completely knocked over by the LHD in the incident.

Figure 1. Depicts the open stope tip edge following the incident.





## Circumstances

The incident occurred on 10 February 2021.

At the time of the incident, a worker was underground at the Murrawombie Copper Mine, near Girilambone in Central NSW. The worker had been tasked with undertaking stope filling activities at the 4792 level by tele remote, which was the accustomed and expected practice at the mining operation.

The mining operation had provided a documented system of work for tele-remote stope filling activities, which the worker was trained and experienced with.

The worker commenced work by setting up his tele-remote system. Once the set up was complete the worker tested the system with an empty bucket to ensure it was working appropriately and then called the cement agitator truck driver to deliver a load of cement to the mixing bay at the 4792 level.

Following delivery of the cement at the mixing bay, the worker commenced mixing the cementitious product (CRF) with the LHD. Mixing of product can only be conducted while the LHD is operated in manual mode (e.g. with an operator in the cab of the LHD). This is due to the complex and confined activity that is being undertaken.

For reasons unknown, the worker drove the LHD through a dirt bund at the stope edge and fell about 20 metres to the level below.

The worker does not recall anything that happened between mixing the CRF and the three days following the incident. The worker believes that his intention was to commence tele-remote loading of the stope with the mixed CRF. The worker believes that it was never his intention to drive the loader near to the stope edge and this is evidenced by the fact that the worker ensured that the tele-remote system was operational prior to mixing the CRF. This was the customary procedure for back filling stopes at the mining operation. The worker also stated that tele-remoting was the preferred option, as it was significantly more comfortable to sit in an air conditioned tele remote hut than to sit in the cab of a loader.

When first responders arrived at the 4792 level, the operator was outside of the machine and still within the stope.

The worker was transported to Westmead Hospital with life threatening injuries. The worker is now at home recovering.

## Investigation

The NSW Resources Regulator responded to the incident on the morning of 11 Feb 2021 and commenced preliminary enquiries. Inspectors conducted interviews, examined documents and examined the scene. Three improvement notices and one prohibition notice under the *Work Health and Safety Act 2011* were issued.



Inquiries will continue and will focus on the mine's documented system of work and supervision arrangements. Inquiries will also consider the effectiveness and compliance to the emergency response system at the mining operation.

#### Recommendations

It is recommended that mine operators should ensure:

- fit for purpose stop blocks are installed and inspected when manual tipping from the edge of a stope
- bunds and associated markings and reflectors are built to the required standard and frequently inspected
- tele-remoting used as the primary control when tipping over the edge of a stope
- when retreat stoping towards the level access road, change management process are in place, to inform the workforce of the change of road layout, before firing out the access road stope.
- mines must consider this scenario when developing their emergency response systems.



**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 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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