

SAFETY ALERT

Jumbo Trailing Cable Incident

INCIDENT

A miner was struck by a trailing cable when a development jumbo was being trammed into a cuddy at an underground metalliferous mine. The miner was struck on the left leg by the trailing cable resulting in serious injuries to his knee.

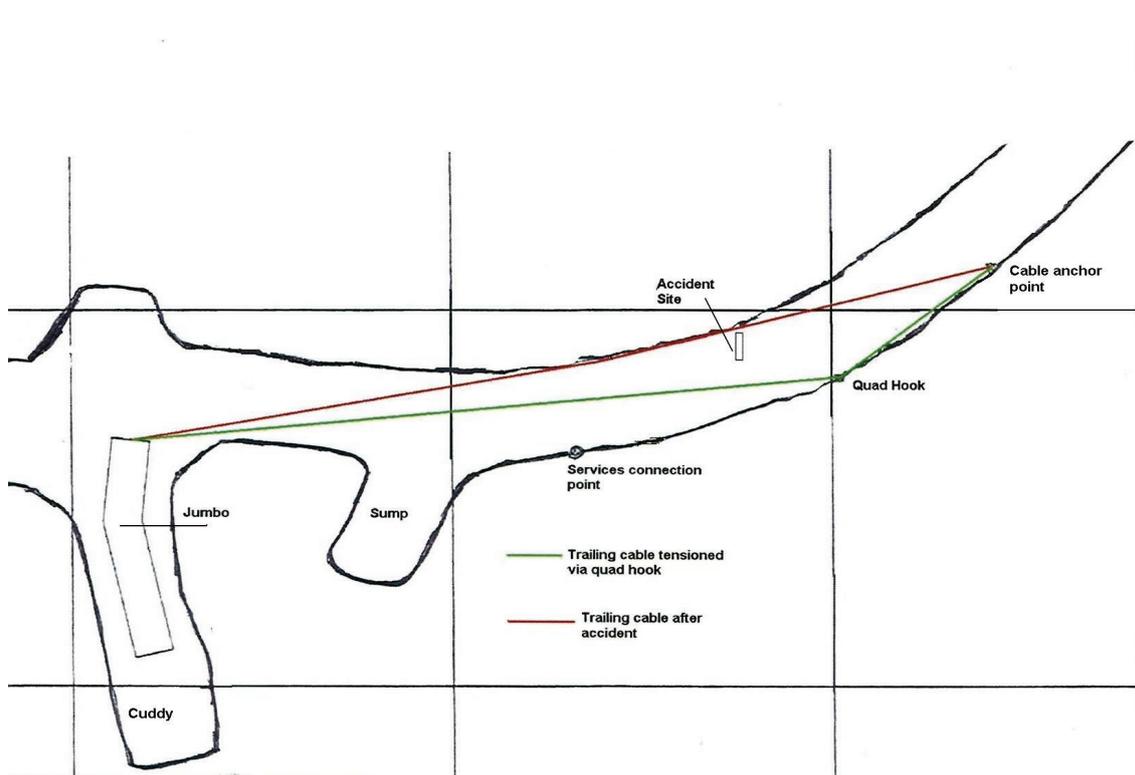
CIRCUMSTANCES

The miner was assisting a jumbo operator connect the cable and services to the jumbo prior to moving it into a cuddy to bore out a development face. The cuddy was approximately 55 metres from the trailing cable anchor point. The access drive to the cuddy was a 50 metre radius curve and the grade of the access drive varied from 1: 7 to 1:20 down.

After the services were connected to the jumbo, the miner was walking back to the anchor point. As he walked back to the anchor point he lifted the trailing cable onto a quad hook hanger on the side wall. At the same time the jumbo operator commenced tramping the jumbo into the cuddy. It appears that as the jumbo commenced turning into the cuddy, which was perpendicular to the access drive, the trailing cable stopped reeling out from the cable reel. The trailing cable became highly tensioned between the anchor point and the back of the jumbo via the quad hook hanger. The quad hook deformed due to the excessive tension on it which resulted in the trailing cable slipping off the quad hook and whipping violently across the access drive. The miner was standing in the path of the trailing cable as it whipped across the drive. The trailing cable hit the miner on the left leg resulting in serious injuries.

Refer photographs of the deformed quad hook hanger and plan showing accident site below.





INVESTIGATION

Investigations are continuing. However, contributing factors may include, but are not limited to, the following:

- The access drive was a 50 metre radius curve and had a grade that ranged from 1:7 down to 1: 20 down.
- The trailing cable was hung on the quad hook hanger without taking into consideration the potential hazard presented by the curved access drive, grade of the access drive and the jumbo tramming into a cuddy that was perpendicular to the access drive.
- The trailing cable stopped reeling out from the jumbo cable reel due to the acute angle between the cable reel and the cable lying in the access drive as the jumbo turned into the cuddy.
- Poor communication between the miner and the jumbo operator.
- A length of trailing cable was not run out from the back of the jumbo prior to tramming into the cuddy.
- No warning system was installed in the jumbo cabin to warn the jumbo operator that the trailing cable reel was stationary and not reeling out.

RECOMMENDATIONS

Develop, implement and train personnel in trailing cable management procedures to ensure that the hazards associated with trailing cables are clearly understood and effectively managed, for example:

- establish and enforce no standing zones around mobile equipment and trailing cables when cables are being run in or out.
- reel out sufficient cable from the cable reel prior to tramming into areas that may result in the reeling out of a trailing cable stopping.
- consider the ability and effectiveness of installing a system in the operator's cabin that warns the operator when a trailing cable reel is stationary and cable stops running in or out.

Regularly audit documented procedures to check compliance and their effectiveness.

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 notice board.

Signed



Rob Regan
DIRECTOR
MINE SAFETY OPERATIONS BRANCH
NSW TRADE & INVESTMENT

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Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing (April 2013). However, because of advances in knowledge, users are reminded of the need to ensure that information on which they rely is up to date and to check the currency of the information with the appropriate officer of NSW Trade & Investment, or the user's independent advisor.