Significant Incident Report No. 238

Subject: Mobile plant interaction results in crush injuries

Date: 12 February 2016

Summary of incident

Note: The Department of Mines and Petroleum's investigation is ongoing. The information contained in this significant incident report is based on materials received, knowledge and understanding at the time of writing.

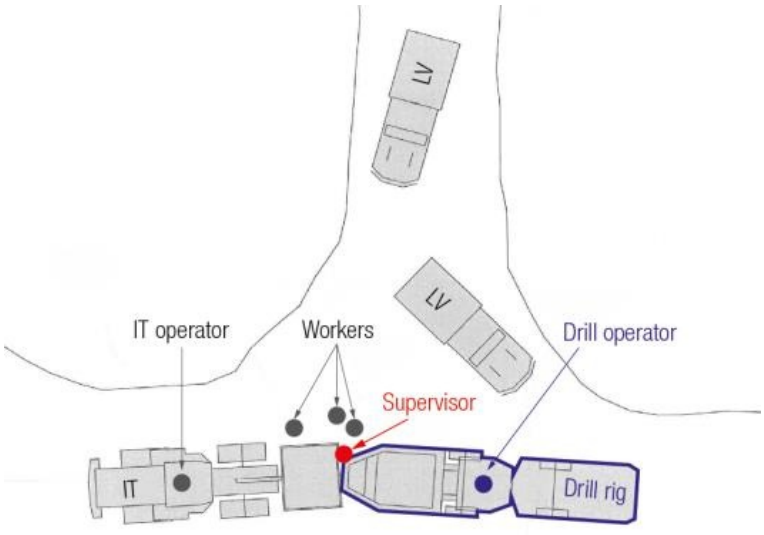
In December 2015, an integrated tool carrier (IT) was parked in an underground main level access, while three workers and a supervisor inspected a damaged man-basket. Two light vehicles (LVs) were parked in an adjacent stockpile. All the parked vehicles had illuminated, flashing beacons.

At the same time, a long-hole drill rig was slowly tramming (horseshoe first) out of the level to the next drill location. While the drill operator was looking for an area to turn the rig around (to tram engine-first), the horseshoe made contact with the IT's basket.

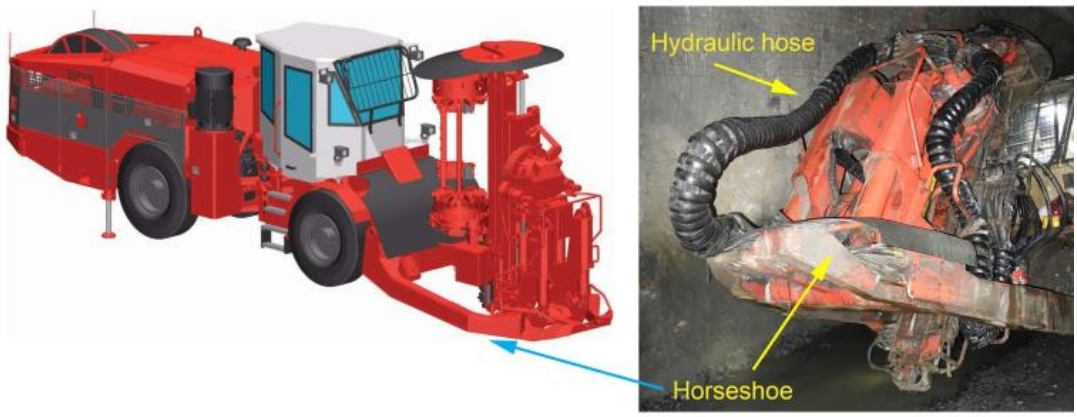
The supervisor – who was facing the basket, taking photographs at the front of the IT – was pinned between the basket and the long-hole drill rig's horseshoe and hydraulic hoses.

Colleagues provided first aid to the injured supervisor until the site ambulance arrived and brought him to the surface. He was transferred to the local hospital for assessment where he underwent surgery for crush injuries to his lower abdomen. Fortunately, his injuries were limited to severe bruising, which required internal stitches.

It appears there was no attempt to communicate with the drill rig operator before his vehicle made contact with the IT.



Plan view of incident scene. Supervisor was caught between the IT's basket and the horseshoe of the long-hole drill rig.



Long-hole drill rig showing the position of the horseshoe and hydraulic hoses.

Direct causes

- The IT was stopped in a high traffic area of the main level access.
- The workers and supervisor were standing next to the IT.

Contributory causes

- Lack of effective communication between personnel.
- Failure to recognise and manage the risks associated with working around mobile equipment.
- The drill operator's field of view was reduced by tramming the long-hole drill rig horseshoe first.
- The stockpile was obstructed by the parked LVs, preventing the long-hole drill rig from turning around.
- Failure to manage the risks associated with congestion and mobile plant egressing underground levels.

Actions required

Mine operators are reminded of the importance of:

- implementing and promoting positive communication protocols to maintain situational awareness
- developing, implementing and reviewing appropriate traffic management systems within all work places
- ensuring mobile plant operators are aware of workers and other mobile plant in their vicinity and potential line-of-fire risks
- promoting continuous awareness of the hazards associated with working in proximity to mobile plant.

Further information

- Department of Mines and Petroleum, Guidance about traffic management

  www.dmp.wa.gov.au/Safety/Guidance-about-traffic-6268.aspx

This Significant Incident Report was approved for release by the State Mining Engineer on 12 February 2016