Significant Incident Report No. 217

Subject: Underground worker crushed between charge-up basket and roof - fatal accident

Date: 21 May 2015

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 knowledge and understanding at the time of writing.

An underground worker using an elevated work platform (EWP) was fatally injured when the charge-up basket he was in moved upwards, crushing him against the roof of the cross-cut. It appears he was leaning over the front of the basket when he accidentally activated the control stick for raising and lowering the basket.

An offsider was working in front of the basket to help guide the charge-up hose into the blast holes.

After the accident, the control stick was found to be bent forward (i.e. in "raise basket" position).

Charge-up basket near the roof of the cross-cut

Postal address: Mineral House, 100 Plain Street, East Perth WA 6004
Telephone: (08) 9358 8002 Facsimile: (08) 9358 8000 ResourcesSafety@dmp.wa.gov.au
www.dmp.wa.gov.au
wa.gov.au

Direct causes

- The worker was leaning over the front of the charge-up basket, in a restricted working space, when the basket moved upwards.

Contributory causes

Nature of task

- Work from a charge-up basket is often undertaken at the front of the basket, so the worker can reach the charge-up hose.
- Rill slopes can restrict forward movement of the charge-up basket and result in the basket being close to the roof.

Design of basket controls

- The control panel is located at the front of the basket.
- Pushing the control stick forward raises the charge-up basket.
- The fail safe switch for the controls is located on top of the control stick, so that a downward force on the top of the control stick can activate the fail safe switch and allow the control stick to move forward.

Procedural

- The operating procedure did not identify the potential crush hazard.
- At this mine, charging-up was typically carried out by a single person.
- The offsider assisting at the time of the accident had not been tasked with spotting, and was not trained to use the EWP.

Actions required

The actions recommended below should prevent similar incidents.

Mine operators

- When undertaking work involving EWPs, ensure the potential for workers to be crushed between the basket and adjacent structures is identified and addressed.
- Inspect all EWPs used on the mining operation to assess the potential for accidental activation of controls.
- Ensure those involved in work using EWPs are familiar with their operation and the use of emergency controls.

Suppliers, importers, manufacturers, modifiers and designers

Ensure the design and construction of EWPs for use on mine sites do not expose workers to hazards. Consider:

- how and where they will be used
- where the controls are located
- prevention of accidental activation of controls
- suitable protection structure for the operator.

Further information

Visit www.dmp.wa.gov.au/ResourcesSafety for information on occupational safety and health in the resources sector, including the following Mines Safety Bulletins and guideline:

- Mines Safety Bulletin No. 116 *Use of mobile elevated work platforms (MEWPs) within or adjacent to structures with restricted access* (December 2014)
  This bulletin refers to incident reports received by the Department of Mines and Petroleum involving the use of mobile elevated work platforms (MEWPs) within or adjacent to structures with restricted access.
- Mines Safety Bulletin No. 114 *Compliance requirements for multi-purpose mobile plant* (September 2014)
  The crush hazard of using work baskets underground also exists for baskets fitted to multipurpose equipment and not just dedicated EWPs.
- *Working at height in underground mines – guideline*
  This guideline highlights "... additional risk to those workers using work platforms underground is that they can be injured if caught between a rising platform and backs (i.e. roof or upper part) or sidewall of the drive."

This Significant Incident Report was approved for release by the State Mining Engineer on 21 May 2015