

SAFETY ALERT

Fatal head injuries in kibble incident

INCIDENT

The incident occurred about 4:20am on 16 March 2013. The shaft sink supervisor got into the kibble at the lower deck of the stage and rang the shaft bell to be hoisted to the brace, a distance of approximately 15 metres. As the kibble passed through the opening in the upper deck the supervisor received fatal head injuries.



The kibble used in the project.

CIRCUMSTANCES

An existing circular concrete-lined shaft was being re-equipped and deepened to allow ore to be hoisted from the lower production areas of the mine. The incident happened in the lower section of the shaft that was being sunk. This section was isolated from the upper section of the shaft by a pentice.

The shaft was being developed as a blind sink using a single kibble, a two-deck stage and a mini-excavator for mucking. Men and materials were transported in the kibble with access to the lower deck of the stage and the shaft bottom being through a 'kibble well' in the stage.

The kibble was suspended by a single head rope and had no guide ropes thereby allowing freedom of lateral movement and rotation. The clearance between the kibble and the kibble well was relatively small where it passed through the two stage decks. This created a hazardous nip-point when people were raised in the kibble.

INVESTIGATION

The Mine Safety Investigation Unit has completed a formal investigation into the incident.

The principal control measure used on this job to prevent this type of injury appeared to be that people travelling in the kibble must ensure body parts did not extend beyond the confines of the conveyance. This incident highlights the inadequacy of such procedural controls on their own. More effective controls, such as elimination of the hazard, substituting, isolating, or implementing engineering controls are required wherever reasonably practicable (*Work Health and Safety Regulation 2011* cl 36).

RECOMMENDATIONS

- Specific risks associated with shaft sinking projects, the use of conveyances and the interaction of conveyances with other shaft sinking equipment must be identified, assessed and effectively controlled.
- Shaft sinking stage should provide adequate clearances for kibles and eliminate potential pinch points.
- Where practicable, suitably constructed man riding cages should be used in lieu of a kibble as a form of shaft conveyance.



An example of a man riding cage.

- Administrative/soft controls should not be exclusively used to manage shaft sinking risks.
- Workers should be adequately trained in the use and safe operations of all shaft sinking equipment.
- Shaft signalling systems should contain a specific signal to identify when people are riding in shaft sinking conveyances.
- Human factors such as fatigue, hours of work and human error should be considered when reviewing shaft sinking risks.
- Mine operators should ensure that contractor's safety management plans are approved and are consistent with the mine operator's safety management plan.
- Lighting on shaft sinking equipment should be used at all times to enhance the working environment and heighten situational awareness.

FURTHER INFORMATION

[Information release](#) issued 16 March 2013 - *IIR13-01 Fatal head injuries*

[Investigation report](#) issued June 2014 - *Fatality at Cobar mine*

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

A handwritten signature in black ink, appearing to be 'Rob Regan', written in a cursive style.

Rob Regan
DIRECTOR
MINE SAFETY OPERATIONS BRANCH
NSW TRADE & INVESTMENT

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