



MINE SAFETY INVESTIGATION UNIT

INFORMATION RELEASE

Fatality

Date	16 March 2013
Event	Fatal head injuries – transport in a shaft sinking kibble
Location	CSA Mine Cobar, NSW

The mine

CSA Mine is a large underground metalliferous mine near Cobar, in Western NSW. A mining services' contracting company was engaged in a substantial shaft refurbishment project at the mine. An incident occurred during shaft sinking operations that resulted in the death of a shift supervisor.

The shaft sinking project

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.

The incident

The incident occurred about 4:20am on the 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 was injured.

Preliminary accounts suggest the supervisor put his head over the side of the rising kibble and sustained crush injuries when his head hit the underside of the top deck.



The kibble used in the project

Controls

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.¹

Outcomes

While man-riding in kibbles is an established practice in shaft sinking, this incident suggests the use of a purpose-built, man-riding conveyance should be considered wherever practicable. If the use of such conveyances is not reasonably practicable then other control measures of equivalent or greater safety need to be used.

Investigation

The Mine Safety Investigation Unit has begun a formal investigation into the incident. Investigators will examine, among other things, the design of the installation, the suitability

¹ *Work Health and Safety Regulation 2011* cl 36.

of the kibble for transporting workers, the procedural or physical measures in place to ensure workers remain within the confines of the kibble, and whether the hazards that materialised on the day had been identified, assessed, and adequately controlled.

Observations

NSW Trade & Investment has a [draft guideline](#) (MDG 33.4) on its website for shaft sinking winders. The guideline contains information that may be of assistance to mine operators who are conducting, or planning to conduct, shaft sinking operations.

The draft guideline draws attention to a number of design considerations for kibbles and equipment, including the risk of injury from falling objects, and structural considerations where a kibble is used for man riding.



An example of a man riding cage

About this information release

The Mine Safety Investigation Unit has issued this information to draw attention to the occurrence of a serious incident in the mining industry. The investigation is in the initial stages. Further information may be published as it becomes available.

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

Information about the Investigation Unit and its publications can be found at:

www.resources.nsw.gov.au/safety/major-investigations

For information about health and safety regulation on mine sites contact a mines inspector at one of our local offices www.resources.nsw.gov.au/safety/mine-safety-offices.

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