



## SAFETY BULLETIN NO: 61

### PRECAUTIONS FOR THE USE OF GIG RISING

The Coroner recently delivered her findings following an inquest into the death of a gig rise miner who fell from a rise in July 1998 at an underground gold mine. The miner was found at the bottom of the rise, attached to a bosun's chair which had become detached from the auxiliary hoist rope in the rise. There was not sufficient evidence for the Coroner to determine precisely how the detachment occurred. However, she made a number of recommendations aimed at preventing a recurrence of a similar incident –

- Due to the specialised nature of this type of mining, that the mining industry consider whether it wishes to implement specific standards to control gig rising rather than merely utilising general safety procedures applicable to all weight-bearing or height-vulnerable workplaces. These may include prohibitions on carrying items while travelling on a bosun's chair, and specified safety ratings for all man-riding equipment.
- That there be more informed supervision of miners and hoist operators engaged in gig rising where, frequently, the miner may have a greater knowledge and experience of the particular style of mining than the supervisor.
- That the level of knowledge of the gig rising process among hoist drivers engaged in the practice be increased, particularly their appreciation of the part played by the hoist in the safety of the process. Specifically, it was recommended that, as part of their training, hoist drivers ride both up and down a rise in gigs and bosuns' chairs (where used) and give signals and directions for moving in the rise in order that they become familiar with the effects within the rise of movements of the hoists which they control.
- That fall arrest equipment, separately attached to the hoist rope, be available whenever a bosun's chair is employed and that its use be enforced strictly by supervisors. This would provide a backup safety device in the event of failure of the attachment or of any part of the bosun's chair itself.
- That gig rising installations be designed so that components of lifting apparatus have a breaking strain greater than the capacity of the lifting device (hoist), thus making the lifting device the "*weakest link*" in the suspension system and bringing the entire system to a halt once the lifting capacity is exceeded. The feasibility of such a system in the case of any particular hoist may affect its safety rating for man-riding.



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- That consideration be given to the improvement of communications between the hoist operator and the rise miner by means of radio, telephone or video during the raising or lowering process.

The attention of mining company employers and registered managers is drawn to *Safety Bulletin No. 39, Vertical Opening Development in Underground Mines (Rise Development)* which was issued in May 1998.

This Bulletin makes the point that the choice of method in rising must be determined using a risk management approach.

With regard to rising, non-entry methods are much less hazardous and are considered to have a lower level of inherent risk.

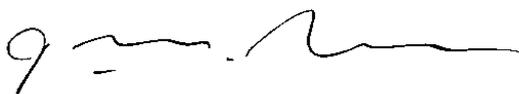
Gig (cage) rising was identified as having limitations and requiring scrupulous attention to good practice.

Where it has been determined that gig rising is the chosen method on the grounds of practicability, a formal risk assessment should be carried out by competent and experienced persons before work commences. This should include a geotechnical assessment of expected ground conditions.

Appropriate controls to minimise risks should then be implemented, and include consideration of the recommendations made by the Coroner.

Travel in the rise using a bosun's chair should be undertaken only in an emergency.

In planning for vertical development by rising, non-entry methods should be considered as a matter of explicit policy, in preference to entry methods.



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