



Mines Safety Significant Incident Report No. 158

Fall from work basket in an underground decline

Incident

A team of three employees had been instructed to remove electricity cables from the backs of a decline tunnel at the intersection with a drive to an operating level.

The employees were using an integrated tool carrier (IT) fitted with an elevating work basket, similar to an elevating work platform (EWP) used in surface construction operations.

The IT was stationary, with two employees in the basket and a third operating the machine. All had completed the site training requirements for the work being undertaken.

The work place was about 6 metres high. To release the cable ties holding the cable, the operator stood on a cross member of the guard rail. While stretching to reach the cable, the employee fell over the edge of the basket guard rail and onto the ground.

It was estimated that the employee fell to the ground from a height of about 4 metres. He sustained a fractured pelvis and contusions to the upper body.

Immediate causes and contributory factors

- Access to the cables was obstructed by a ventilation bag, water pipes and other services.
- The movement and final positioning of the work basket on the IT was limited by the drive dimensions and services suspended from the backs and shoulders of the drive.
- The employee who was injured was not wearing fall arrest equipment, and there was no fall arrest equipment in the basket.
- There were no specific anchor points provided for the correct attachment of fall arrest equipment within the confines of the work basket.
- The procedures at the mine did mention that fall arrest equipment should be used where there was the risk of a fall from height.
- A job safety analysis (JSA) or similar work plan was not completed for the task, and no specific instructions were given as to how the work was to be carried out safely.
- The investigation revealed that the injured employee stood on the lower of the two basket hand rails to reach the high workplace.
- The investigation also revealed that employees often had to stretch and lean over the rails to work on mine service facilities such as pipes, cables and support elements.

Comments and preventative actions

- Regulation 4.5(1) of the Mines Safety and Inspection Regulations 1995 states:

The manager of, and each employer at, a mine must ensure that

(a) Fall arrest equipment is provided to employees at a workplace if the risk of injury to employees from falling cannot be eliminated from the workplace or the system of work at the workplace; and

(b) the equipment referred to in paragraph (a) is

(i) appropriately designed for the task for which it is to be used;

(ii) *used in such a way as to reduce, so far as is practicable, the possibility of injury to the user;*
and

(iii) *properly maintained.*

- The hazard of falling from elevated work baskets and platforms is not new, and for surface operations has required the use of fall arrest equipment in EWPs for many years.
- Not only can employees fall over or through guardrails, but there have been instances where baskets have detached from mountings, hydraulic or pneumatic cylinders have failed, or machines have become unstable. All these hazards can result in employees falling or being thrown out of work baskets, with the potential of serious injury or death.
- Managers and employers should review the work practices at underground operations where employees are required to work at a height from baskets and platforms.
- Where employees are required to work at height from a basket, there is a demonstrated risk of falling and sustaining injury. The provisions of Regulation 4.5 should therefore be applied to reduce the risk of injury.



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