Mines Safety Significant Incident Report No. 180

Combination extendable spreader and lifting beam fails during lifting

Summary of incident

A load fell when a combination extendable spreader and lifting beam failed due to incorrect use during a lift. At the 2.6 metres extension setting, the beam was subjected to a 7.2 tonne lift.

The working load limit (WLL) as a spreader beam is 7.3 tonnes, but the combination spreader and lifting beam was rigged in the lifting configuration. The WLL for a lifting beam is only 1.1 tonnes.

Fortunately, no-one was within the drop zone when the beam failed and the load fell.

Photographs showing broken beam after lift (left) and placard indicating WLLs when being used as a spreader beam and lifting beam of various lengths.

Probable causes

This incident was caused by incorrect use and rigging of the beam.

As a spreader beam: WLL = 7.3 tonnes

As a lifting beam: WLL = 1.1 tonnes
**Action required**

Under Regulation 4.13(1)(b) of the Mines Safety Inspection Regulations 1995, employees at a mine must be assessed as competent to:

- perform the tasks they will be assigned

and

- operate any plant or equipment they will be required to use.

This means that, in addition to any required high-risk work licence, the person undertaking lifting operations must be assessed to ensure they are competent to use the equipment provided.

Where a combination spreader and lifting beam is used, the person doing the lift must ensure:

- the beam placard is reviewed and the relevant WLL is followed for the chosen configuration
- the beam is rigged in the correct configuration.

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