



Significant Incident Report No. 270

Subject: Operator trapped between EWP and overhead structure

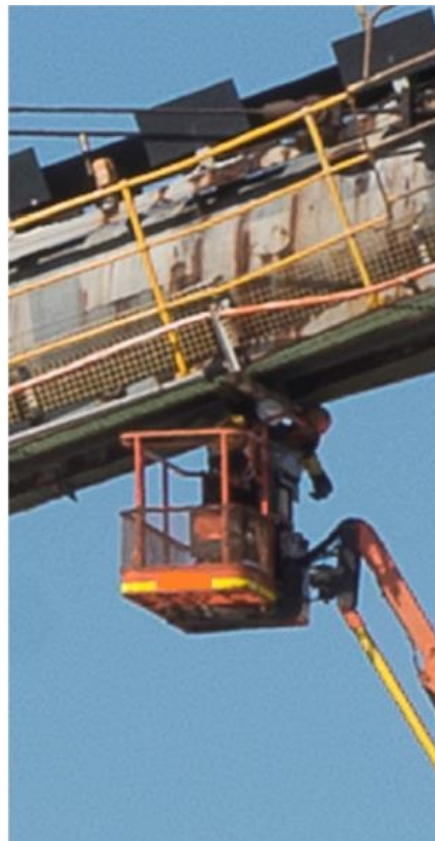
Date: 15 November 2018

Summary of incident

Note: The Department of Mines, Industry Regulation and Safety's investigation is ongoing. The information contained in this significant incident report is based on materials received, knowledge and understanding at the time of writing.

In July 2018, an operator and a surveyor were in a mobile elevating work platform (EWP), taking survey measurements on a stacker structure to improve conveyor belt alignment. They were working in close proximity to the underside of the stacker conveyor frame, located about 27 metres above the ground.

When the operator moved the EWP basket upward, his head became trapped between the stacker frame and the secondary guarding sensor bar in the basket. The alarm at the EWP base alerted the spotter, who then proceeded to lower the basket. The operator received injuries that had the potential to be serious, and he lost consciousness for a few minutes.



Elevating work platform operator trapped against underside of conveyor structure

Direct causes

The operator was leaning over the controls when he moved the EWP basket upwards, trapping him against the conveyor structure above.

Contributory causes

- The job hazard analysis (JHA) did not identify the hazard of being crushed against the stacker.
- The EWP basket was directly below and in close proximity to the stacker conveyor frame.
- The EWP operator activated the boom extend function instead of boom retract.
- The EWP function speed control was set in fast mode (rabbit) instead of slow mode (tortoise).
- Although activation of the secondary guarding sensor bar prevented further movement of the EWP basket, it did not retract the basket due to insufficient continuous pressure being applied.
- There was a delay in bringing the basket to the ground, as the spotter was unaware of the boom operating envelope programmed into the EWP safety system.

Actions required

The following actions are recommended to prevent similar incidents:

- Before undertaking work involving EWPs in the vicinity of fixed structures, ensure the potential hazard for workers to be crushed is identified, and effective controls implemented to prevent exposure to the hazard.
- Ensure that the emergency plan for EWP work in restricted-access areas includes a suitable response to entrapment or entanglement within a structure.
- Where there is a risk of crush injury to a person in an EWP from an overhead fixed object, use EWPs fitted with engineering controls such as protective cages and sensor devices.
- Implement positive communication protocols between all personnel involved in the work.
- Ensure all workers involved in the operation of an EWP have received adequate training and verification of competency for the equipment being used.

Further information

- Mines Safety Bulletin No. 116 *Use of mobile elevated work platforms (MEWPs) within or adjacent to structures with restricted access*
- Significant Incident Report No. 241 *Underground worker crushed between integrated tool carrier (IT) work basket and roof of excavation (backs)*
- NSW Resources Regulator, <https://www.resourcesregulator.nsw.gov.au/>
Investigation report - *Fatality at Boggabri Coal Mine - 21 May 2014*
- NSW Government Safety Bulletin No. SB15-04 *Collisions of mobile EWPs increase*
- Elevating Work Platform Association of Australia, www.ewpa.com.au/
- International Powered Access Federation, <http://www.ipaf.org/>

This Significant Incident Report was approved for release by the State Mining Engineer on 15 November 2018