

MINE SAFETY INVESTIGATION UNIT

INFORMATION RELEASE

Serious injury

Incident date 1 February 2016
Event Worker seriously injured in fall from articulated dump truck
Location Sibelco Salt Ash Sand Plant, Salt Ash, NSW

Overview

A plant operator was preparing to unload a Volvo A30 articulated dump truck that was transported to site on a low loader. During preparation, the operator accessed the top of the right front wheel arch to adjust the side mirror. After making the adjustment, the operator turned and walked toward the access steps where he fell to ground level. The operator suffered a skull fracture in the fall.



**Photograph of the access ladder provided on the off-side of the Volvo A30 dump truck.
The red arrow indicates the direction of the fall from the front wheel arch.**

The mine

The mine is in the Stockton Bight area north of Newcastle. The mine is operated by Sibelco Australia Limited. The mine produces silica sand for glass making and other purposes. There are usually about 12 workers on site.

The incident

The injured person (the plant operator) was employed at the mine and considered to be an experienced mobile plant operator. The plant operator was given authority to drive the dump truck from the low loader.

The plant operator began his eight-hour shift at 6 am. The incident occurred at about 1 pm. The plant operator had not worked at the mine in the previous three days. The unloading task was being undertaken in clear and dry weather conditions during daylight hours.

At the time of the incident, another worker from the mine and the driver of the low loader were at ground level setting up for the truck to be unloaded from the low loader.

The incident was recorded on CCTV video equipment. The video shows that the plant operator was alone on the right side front wheel arch and that the dump truck and the low loader remained stationary during the incident.

The Volvo A30 dump truck had access grab handles for the steps, and handrails for the platform next to the driver's left side entry door of the cabin. The right side did not have a handrail for the platform, although two grab handles had been installed for the right side access steps.

The plant operator appears to have turned to face the rear of the dump truck and walked to the top access step where he has turned his upper body and reached for the grab handle on his right with his left hand. While twisting to reach the grab handle he has fallen to ground level below the low loader.

The height of the dump truck wheel arch platform to ground level is about 1.8 metres. While on the low loader the height was around 2.7 metres.

The plant operator was attended by NSW Ambulance staff at the mine and then transported to a nearby hospital.



Photograph showing access handrails provided on the driver's entry door side of the Volvo A30 dump truck.

The investigation

A Mine Safety inspector responded to the incident and undertook a range of enquiries.

The NSW Mine Safety Investigation Unit has commenced an investigation to determine the cause and circumstances of the incident.

The mine operator is assisting with the investigation.

An investigation report will be prepared for the Secretary of the NSW Department of Industry.

Safety observations

A person falling from height from mobile plant is a foreseeable risk and adequate measures should be put in place to control the risk. The provision of safe access equipment on mobile plant is a critical control measure to reduce the risk of falling from mobile plant.

Mine operators must manage the risk of a person falling from one level to another that is reasonably likely to cause injury to that person or any other person.

There are a number of health and safety duties and requirements set out in the *Work Health and Safety Act 2011* and *Work Health and Safety (Mines and Petroleum Sites) Act 2013*. These duties are applicable to persons conducting businesses or undertakings that operate mobile plant, and to suppliers and manufactures of mobile plant.

Information on safe access to earth moving machinery is provided to industry through WHS legislation, approved codes of practice, ISO Standards, Australian Standards and published mine design guidelines.

In particular, mine operators should review:

- clause 78 and 79 of the *Work Health and Safety Regulation 2011* (NSW) for the management of risk of falls
- SafeWork NSW, *Managing the risks of falls at workplaces code of practice* (April 2016)
- the department's MDG 15 *Guideline for mobile and transportable equipment for use in mines* (March 2002). In particular, provisions relating to access to equipment, walkways and platforms.
- AS 3868-1991: *Earth-moving machinery - Design guide for access systems*. This Standard recommends criteria for design of component parts of access systems on earth-moving machines having engine power in excess of 15 kW.

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 ongoing. 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. 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 Industry, Skills and Regional Development or the user's independent adviser.

Information about the Investigation Unit and its publications can be found

at: www.resourcesandenergy.nsw.gov.au/miners-and-explorers/safety-and-health/major-investigations

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

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