

MINE SAFETY INVESTIGATION UNIT

INFORMATION RELEASE

High potential incident

Incident date 12 March 2016

Event Collision between front-end loader and light vehicle

Location Whitehaven Coal Handling Preparation Plant, Gunnedah NSW

Overview

A Caterpillar 992 front end loader reversed into a light vehicle that entered a coal stockpile work area. The dual cab Toyota Hilux was damaged but the light vehicle operator was not injured.



Photograph taken by the mine of the damaged light vehicle and the loader involved in the incident.

The coal handling preparation plant

Whitehaven Coal Limited operates the coal handling preparation plant (CHPP) on the Kamilaroi Highway near Gunnedah, NSW. The CHPP has a rated throughput of 500 tonnes per hour and directly loads into an 800 tonne rail loading bin. Coal is trucked from Whitehaven's Tarrawonga and Rocglen open cut mines to the CHPP by a contract coal haulage firm. The coal haulage contractor uses road trucks with side dumping tray and trailers.

The CHPP operates five days a week with scheduled overtime on weekends for train loading and maintenance.

The incident

The incident occurred at 2.20 pm on Saturday 12 March 2016. The incident occurred eight hours into the shift.

At the time, the only Whitehaven Coal employees on site were the two operators involved in the incident. The operator of the Caterpillar 992 front-end loader was the leading hand for the shift.

At the time of the incident, one of the contract haulage trucks became dry bogged on a coal stockpile (Pad 4A). The loader operator parked the loader near the bogged truck and left the operator's cabin to inspect the tow pin on the back of the loader.

At the same time the operator of the dual cab Toyota Hilux light vehicle arrived at the stockpile area to swap with the loader operator so that the loader operator could take a meal break.

The site rules require all vehicles entering the CHPP to establish positive communications with mobile plant operating in the CHPP before entering. The light vehicle operator attempted to do this at the designated point of entry to the CHPP but received no response. The light vehicle operator reported that there was heavy radio traffic at the time due to the bogged haulage truck despite a minimal number of employees on site.

The site rules also required transportation vehicles to be parked in designated parking areas. The light vehicle operator did not park in the designated area and instead parked the light vehicle next to the loader.

During this time, the loader operator returned to the operator's cabin and began to reverse. The light vehicle operator was in the process of getting out of the vehicle when he heard the loader reversing signal.

The loader's right front wheel skimmed the light vehicle near the driver's door and the loader bucket impacted the rear of the light vehicle before it stopped. The light vehicle operator then drove the damaged vehicle away from the loader.

Both vehicles were parked. The loader operator got out of the loader and checked on the welfare of the light vehicle operator. The loader operator then reported the incident to his supervisor.

Both operators were shaken by the incident.

The investigation

A department 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 cooperating with the investigation.

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

Safety observations

Mobile plant interactions in mines and coal handling preparation plants, particularly between light and heavy vehicles, are a well-known risk to the industry.

When operating or travelling in mobile plant, the consequences of collision with other mobile plant can include serious injury or death. Positive communications and adherence to safety management systems is crucial.

Mine operators should consider:

- opportunities to eliminate light and heavy vehicle interactions
- the adequacy and robustness of their surface transport management plans and communication systems and protocols on site
- use of the available technology to control vehicle and mobile plant interactions such as proximity detection, collision avoidance and proximity lockout systems
- human factors such as environmental, organisational and job factors with the goal of managing human reliability and failure.

Mine operators are reminded of their duty to identify hazards and manage risks to health and safety in accordance with the provisions of the *Work Health and Safety Act 2011* and *Work Health and Safety (Mines and Petroleum Sites) Act 2013* (NSW) and Regulations.

Further information

See relevant safety alerts, safety bulletins and investigation information releases, including:

[IIR15-03 Haul truck and light vehicle collide](#)

[IIR14-01 Dozer crushes light vehicle at Mount Arthur mine](#)

[IIR13-06 Collision between haul truck and light vehicle.](#)

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

Issued by:

Steve Orr

Manager Regulatory Audit and Investigation Unit
Compliance and Enforcement Branch