

Dangerous incident

- **Incident date:** 17 May 2017
- **Event:** Dangerous incident during blasting at open cut coal mine
- **Location:** Moolarben Mine, Ulan NSW

Overview

Workers were at risk of being struck by flyrock when they remained in an exclusion zone during blasting at an open cut coal mine. Flyrock from an overburden blast struck a light vehicle near the workers. The flyrock damaged the bonnet and front grill of the light vehicle. No workers were struck by the flyrock. At the time of the shot being fired the workers and light vehicle were positioned at the firing location about 246 m from the blast area. The mine's blasting procedures required an exclusion zone of 300 m for mobile plant and equipment and 500 m for workers. The NSW Resources Regulator has commenced an investigation into the incident.



Photograph 1: Damage to bonnet and front grill of light vehicle caused by flyrock.

The mine

The Moolarben Coal Operations are located 40 km north of Mudgee in the western coalfields region of NSW. The mine operates 24 hours a day and has over 500 people working as either direct employees or as contractors.

Moolarben Coal Operations comprises four open cut and three underground mining areas. Moolarben Coal Operations Pty Ltd (MCO) is the mine operator and is owned by a joint venture comprised of Moolarben Coal Mines Pty Ltd, Sojitz Moolarben Resources Pty Ltd and a consortium of Korean energy companies.

MCO and Moolarben Coal Mines Pty Ltd are wholly owned subsidiaries of Yancoal Australia Limited.

The incident

On 17 May 2017 at about 12.07 pm, an overburden blast occurred at the Moolarben No. 4 Open Cut. When initiated the blast projected material, known as flyrock, beyond the boundaries of the blast area. At the time of the blast, six workers and light vehicles were positioned at the firing location which was approximately 246 m from the blast area.

As the flyrock began falling to the ground some of the workers took cover while others attempted to visually observe, track, evade and warn others of the flight path of the flyrock. Flyrock landed and struck one of the nearby light vehicles damaging the bonnet and front grill. No workers were struck by the flyrock. After the flyrock fell to the ground the workers relocated themselves and the vehicles from the immediate area due to dust and fumes produced by the blast.

The mine had written blasting procedures in place that prescribed exclusion zones of 300 m for mobile plant and equipment and 500 m for workers during blasting.

Early information suggests the flyrock was ejected from a single shot hole. The most likely cause was under-stemming, potentially caused by bridging of the stemming, but other potential causes will be examined during the investigation.

The investigation

The Resources Regulator has commenced an investigation into the incident. The mine operator is cooperating with the investigation. An investigation report will be prepared for the Secretary of the Department of Planning and Environment.

Safety observations

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

There is specific legislation about the management of risks associated with explosives. Persons conducting business or undertakings should be aware of clauses 26 and 31 and Schedule 2 of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

Mine operators must ensure that appropriate information, instruction and supervision is provided to workers in relation to exclusion zone requirements prescribed within the mine's explosives control plan.

Mine operators are reminded that appropriate systems must be in place to review and audit the explosives control plan and blasting work practices to ensure that exclusion zone requirements are enforced.

About this information release

The Resources Regulator has issued this information to draw attention to the occurrence of a dangerous incident in the mining industry. Investigations are ongoing and 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 Planning and Environment or the user's independent adviser.

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RM8 reference	PUB17/471
Mine safety reference	IIR17-08
Date published	31 July 2017