

INVESTIGATION INFORMATION RELEASE

DATE: 21 MAY 2021

Person at risk from flyrock at quarry

Incident date: 8 April 2021

Event: Dangerous blasting incident at a hard rock quarry

Location: Cootamundra Quarry, Cootamundra NSW

Overview

A person was inside the exclusion zone when a blast was initiated at the Cootamundra Quarry. The person did not suffer any physical injury but experienced trauma as a result of being exposed to the blast and flyrock.

Figure 1: View looking north from area adjacent to blast showing location of person within blast exclusion zone



The quarry

The quarry is a hard rock quarry owned and operated by Milbrae Quarries Pty Ltd (**Milbrae**). It is situated on the Olympic Highway about four kilometres southwest of Cootamundra, NSW.

The incident

The quarry had scheduled a blast for 1pm on 8 April 2021 and, earlier that same morning, notified a worker at the nearby concrete batching plant (**concrete plant**) of the scheduled time of the blast. The concrete plant borders the quarry and is owned and operated by Tegra Australia Pty Ltd (**Tegra**). The concrete plant and quarry share a common access road to their respective sites from the highway. The Milbrae office is located at the northern end of the quarry near the concrete plant.

The quarry notified the Tegra worker as the concrete plant is within the quarry's defined blast exclusion zone.

Prior to the scheduled 1pm blast, the Tegra worker left the concrete plant and travelled into Cootamundra. He returned to the concrete plant about 1:30pm and assumed that the blast had been completed as planned at 1pm. Unbeknown to him the blast had been delayed until after 2pm because of issues associated with readying the shot for ignition. The Tegra worker travelled down to a standpipe located at the bottom of a ramp into the water-filled pit to fill the agitator on his truck.

At about 2:15pm, while filling the agitator, the Tegra worker felt a rush of air and sheltered behind the truck for protection as the blast was initiated and flyrock landed around him. When the flyrock stopped falling the worker turned off the pump and drove the truck out of the quarry to the concrete plant and Milbrae office where he reported the incident.

The Tegra worker was approximately 347 metres from the blast when the shot was fired.

The investigation

The Resources Regulator has commenced an investigation to determine the cause and circumstances of the incident. The investigation will, among other things, consider the systems in place at the quarry to control the risk of people entering the blast exclusion zone, what measures were in fact implemented on the day to control the risk of people entering the exclusion zone, instruction, training and supervision of the workers associated with carrying out the blast on the day, as well as the adequacy of policies and procedures relevant to the incident.

The quarry operator is co-operating with the investigation.

The Resources Regulator's initial inquiries have established that the Tegra worker:

- was not aware that the blast had been delayed

- was able to enter the blast exclusion zone without impediment or being detected.

Safety observations

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

Flyrock and inadequate blast area security contribute to most blasting-related incidents.

Mine and quarry operators must comply with both general risk management and explosive specific legislative requirements including clause 26 (Principal Control Plans), clause 31 (Explosives) and Schedule 2 (Explosives Control Plan) of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

Mine and quarry operators should ensure:

- their explosives control plan is reviewed to verify that it adequately identifies and controls specific risks associated with the use of explosives at their sites
- the shotfirer-in-charge designs and loads a shot with sufficient burden, spacing and stemming to prevent flyrock and other dangerous effects
- blast areas remain clear until the blast has been fired and the “all clear” has been given by the person firing the blast
- security arrangements associated with blasts are adequate to identify any person that may unwittingly enter the exclusion zone
- processes are in place to control the risk of injury or death if the exclusion zone is breached
- the safety of all persons in a blasting area.

Further information

Please refer to the following guidance materials:

- Australian Standard AS 2187 - 1998 Explosives—Storage, transport and use
- Safety Bulletin – [SB21-02 Flyrock from blasting activities](#)
- Investigation information release – [IIR19-01 Shot firing incident damages vehicles](#)
- Investigation report – [Dangerous blasting incident Albury Quarry – 10 April 2018](#)
- Investigation information release – [IIR17-08 Flyrock incident at open cut coal mine](#)

- Investigation report – [Dangerous shot firing incident at the Moolarben Coal Mine on 17 May 2017](#).

About this information release

The Resources Regulator has issued this information to draw attention to the occurrence of a serious incident in the mining industry. Further information may be published as it becomes available.

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- learn more about our work on causal investigations and emergency response
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