

INVESTIGATION INFORMATION RELEASE

DATE: 10 MARCH 2021

Worker suffers serious injuries when pinned by boom of a continuous miner

Incident date: 5 February 2021

Event: Dangerous incident in underground coal mine

Location: Myuna Colliery, Lake Macquarie NSW

Overview

A mine worker was in the process of picking up a feeder cable behind a moving Joy 12CM wide head continuous miner (**the miner**) when his upper body became pinned between the boom of the miner and the rib. The worker sustained serious internal injuries, arm and rib fractures.

Figure 1 Position of continuous miner after worker was released





The mine

Myuna Colliery (**the mine**) is an underground coal mine owned and operated by Centennial Myuna Pty Limited. Myuna Colliery is located in the Newcastle Coalfield at Wangi Wangi on Lake Macquarie, about 35 km south of Newcastle, NSW.

The incident

The incident occurred in the mine's 9 East Panel in Heading 5 outbye of cut-through 93.

Three of the night-shift mine workers were tasked with continuing first workings and forming the intersection in the heading. The workers commenced cutting coal about 11:15 pm. The injured worker and another worker initially operated shuttle cars while the third worker operated the miner.

Shortly after midnight, the workers began installing bolts in the heading and right-hand breakaway. The miner was angled into the right-hand breakaway. The miner operator and the other shuttle car operator worked from bolting rigs located on each side of the miner. The injured worker stood on the right-side platform of the miner just behind the miner operator. He passed bolts forward.

At some point the injured worker left the platform of the miner. It had been identified that the left-side bolt storage cassette on the miner was empty and needed replacing. The miner concluded its bolting cycle and prepared to tram outbye. Its boom was angled toward the right rib at an angle of 21 degrees (relative to the continuous miner body) and remained in this position throughout the incident.

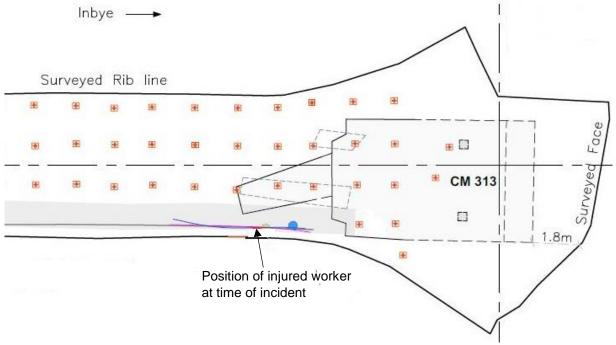
The miner operator trammed the miner towards the centre of the heading using backward and forward movements.

The miner slewed to the left which caused the boom of the miner to move in a sideways direction towards the injured worker who was standing next to the right rib.

The injured worker became pinned between the right-side of the boom and the rib. The miner operator heard the injured worker's screams and slewed the miner away from the rib thereby releasing the worker.

An emergency response was activated. The worker was transported to hospital where he underwent surgery. The worker sustained serious internal injuries to his kidneys and lungs. He also suffered serious arm fractures and multiple rib fractures.

Figure 2 Incident area showing position of miner after the injured worker was released



The investigation

The Regulator has commenced an investigation to determine the cause and circumstances of the incident. The investigation will, among other things, consider the design of the equipment, instruction, training and supervision of the workers involved as well as the adequacy of policies and procedures relevant to the incident. The mine operator is co-operating with the investigation.

The Regulator's initial inquiries have indicated that:

- The miner involved in the incident was not fitted with a proximity detection system.
- The miner operator was unaware of the location of the injured worker immediately prior to the incident.
- The injured worker was unaware that he was in close proximity to the boom of the miner immediately prior to the incident.

Safety observations

Mine operators and contractors 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* and regulations.

Mine operators should:

- Review their safety management systems to ensure they adequately identify and control the risks associated with interactions between continuous miners and workers.
- Assess the practicability of installing proximity detection systems on continuous miners. Proximity detection systems significantly reduce the risk of death or serious injury caused by workers being pinned or crushed around continuous miners.
- Identify that administrative controls such as no-standing procedures are lower-order controls. When relied upon, no-standing procedures should:

be clear about what the no-standing requirements are across all continuous miner operations
be relevant to the type and model of continuous miner used
supplement other administrative controls in relation to miner continuous operations including establishing positive communication during key continuous miner operations.

Ensure that workers are regularly trained in relation to the hazards that exist working around continuous miners.

Workers should:

- When operating a miner, keep other workers out of no-go zones and in safe locations when moving machines.
- Ensure that positive communication is maintained between miner operator and other workers during tramming operations.
- Always maintain situational awareness when working near moving mining equipment.

Further information

Please refer to the following guidance materials:

- Code of Practice Managing the risks of plant in the workplace
- Mining Design Guideline MDG 2007 Guideline for the selection and implementation of collision management systems for mining



About this information release

The 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
- view our publications on other causal investigations.

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