Investigation information release

Date: April 2025

Workers injured by suspected gas and rock burst at underground coal mine

Incident date: 6 April 2025

Event: A suspected gas and rock burst occurred while operating a continuous miner in a development panel of an underground mine. Four workers were in the vicinity, resulting in three being partially buried.

Location: Appin Colliery, Douglas Park Road, Douglas Park, NSW 2569

Overview

A suspected gas and rock burst occurred at Appin Colliery, hitting and partially burying a continuous miner and injuring 4 workers.

The mine

Appin Colliery is an underground coal mine at Appin in NSW, about 38 kilometres north-west of Wollongong, NSW. The mine is operated by Endeavour Coal Pty Limited, a subsidiary of GM3, and uses the longwall method of mining.

The incident

Four mine workers were operating a continuous miner about 133 metres inbye of 11 cut-through at B heading in the Razorback Mains development panel on 6 April 2025. The heading runs parallel to a known geological structure.

Earlier, sections of the heading were developed using a grunching mining method, which is an outburst mining control method that removes persons from the face in identified high-risk areas, by progressively advancing the mining face using shotfiring. At the time of the incident the development of the heading had returned to normal mining methods using a continuous miner under the approved authority to mine.

At 2:15 am workers were positioned on the platforms of a 12CM30 continuous miner. They had completed mining the cut-out sequence and were preparing to position mesh and bolt up to the mining face. The roof and ribs in the vicinity of the workers was supported by installed bolts and mesh. An estimated 100 tonnes of sandstone roof material and gas has then abruptly ejected from

above the coal seam in the heading roof, hitting and partially burying the continuous miner and 3 of the 4 workers. The fourth worker, on the left side platform of the continuous miner was hit with ejected rock material.

First responders attended the area, manually removed the ejected rock material to free the workers and provided first aid. The workers suffered various injuries including cuts, abrasions and injuries to joints. One worker suffered rib, pelvis and vertebrae fractures. All 4 workers were transported by ambulance for hospital treatment.

The Resources Regulator was notified and sent an inspector and investigators to the site, attending that same day and commencing enquiries into the incident.

Figure 1: The continuous miner partially buried in rock material in Razorback Mains B heading 11-12 cut-through

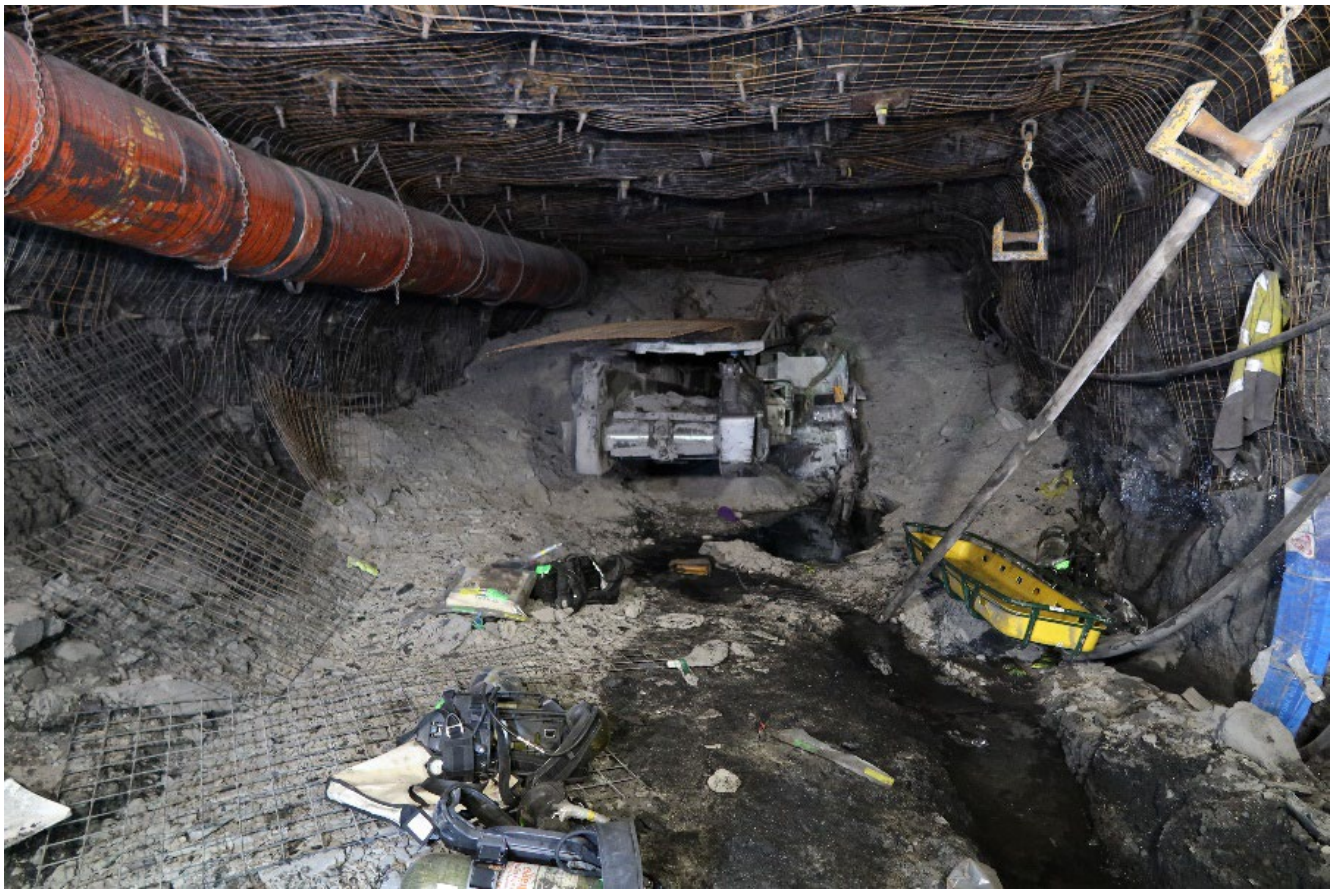

Figure 2: A pile of ejected rock after recovering the continuous miner from Razorback Mains B heading 11-12 cut-through

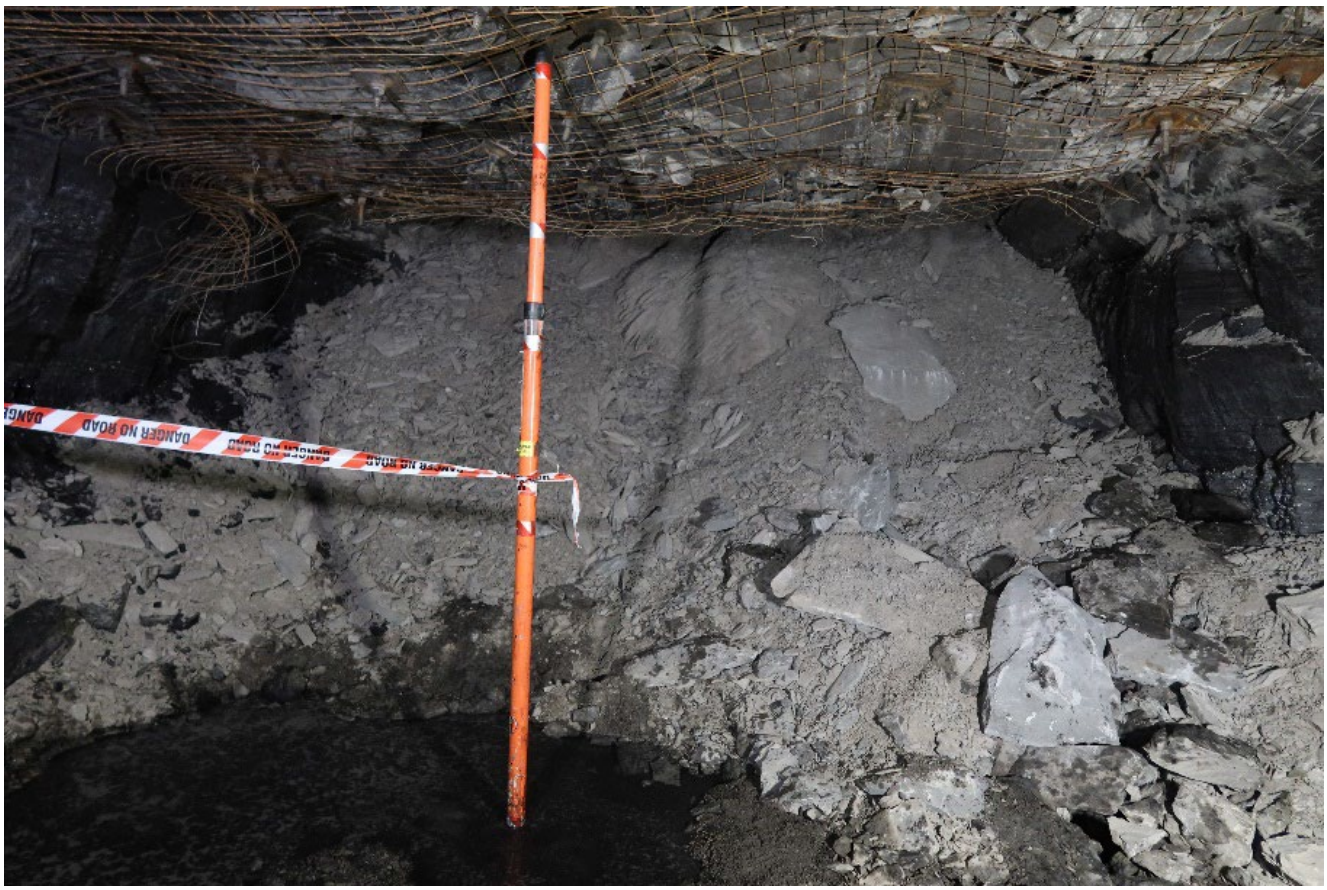

Figure 3: The void above the coalface in Razorback Mains B heading 11-12 cut-through

The investigation

The Regulator commenced an investigation to determine the cause and circumstances of the incident that will explore, among other things, the:

- mechanism of failure, including whether the incident was a geology and/or gas-driven event
- adequacy of the safety management system in identifying and managing hazards and risks associated with outbursts and strata failure, including identifying, assessing geological structures and how ground stress and gas pressure is managed during specific mining activities including development
- adequacy of the strata failure principal hazard management plan (PHMP) and associated procedures in implementing control measures to manage the risk of strata failure when developing underground headings
- adequacy of the gas outburst principal hazard management plan and associated procedures in implementing control measures to manage the risk of outbursts when developing underground headings
- instruction, training, experience and supervision of workers in relation to identifying and assessing ground support and strata conditions

Safety information

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

In particular, underground mine operators must:

- prepare and implement a PHMP for a mine if they identify a principal mining hazard is present, including a mandatory gas outburst management plan, and a ground or strata failure management plan.
- consult with workers when conducting the risk assessments used to prepare the plan.
- carry out a comprehensive documented risk assessment for the PHMP for gas outbursts and ground or strata failure.
- ensure the PHMP includes a record of the most recent risk assessment conducted in relation to the principal hazard, in accordance with clause 28(3)(d) of the *Work Health and Safety (Mines and Petroleum Sites) Regulation*.
- carry out audits of the gas outburst and strata failure hazard management plans, as part of the safety management system.
- review the PHMP for gas outburst and ground or strata failure during the course of mining, if a risk control measure is reviewed under clause 38 of the *Work Health and Safety Regulation* or clause 15 of the *Work Health and Safety (Mines and Petroleum Sites) Regulation*. Relevant circumstances to trigger a review may include a:
  - significant deviation from the assumptions or expected conditions that are encountered
  - change in the workplace or work environment occurs

— new hazard or risk is identified

— notifiable incident has occurred.

Further information

Please refer to the following guidance materials:

- NSW code of practice – Strata control in underground coal mines
- Technical reference guide - Gas outbursts - principal hazard management plan
- Safety alert SA20-02: Roof fall buries a continuous miner – miners take evasive action to prevent injury
- Safety bulletin SB2022-01: Strata failures increase in underground coal mines across the state
- Investigation information release IIR24 05 - Dangerous incident at Clarence Colliery – roof fall
- Investigation information release IIR22-07 - Outburst at NSW underground coal mine.

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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