

# Investigation information release

Date: July 2023

## Serious injury of a Jumbo offsider during drilling work

**Incident date:** 19 June 2023

**Event:** Serious injury of a worker while fitting a drill steel to a Jumbo

**Location:** Cadia East Underground Mine

### Overview

An offsider working on a Jumbo drill rig was seriously injured when his arm became entangled on a rotating drill steel.

### The mine

Cadia East Underground Mine is a large gold and copper mine in the Cadia Valley, about 20 kilometres south of Orange, in the central west of NSW. The mine is operated by Newcrest Mining Limited. Several workers, including the injured worker, are employed by Face Mining Services Pty Ltd, who provide labour hire services to the mine.

### The incident

A Jumbo operator and an offsider were developing an underground drive in the mine at 4670 decline, 301 east heading at 8.55pm on 19 June 2023. A Jumbo drill rig was being used to conduct drilling, bolting, and meshing for installing ground support in the heading. One of the offsider's tasks was changing various components on the booms of the Jumbo as the ground support work progressed.

Immobiliser switches used to isolate power to the booms are positioned on the front left and right sides of the Jumbo (figure 4). The offsider approached the front of the Jumbo to change a component on the righthand boom, which was angled back towards the left side of the Jumbo. The worker inserted a 3.7 metre drill steel into the coupling of the righthand boom as the coupling rotated. The offsider's left arm became entangled on the rotating drill steel, resulting in traumatic amputation to his left arm below the elbow. An emergency response was activated resulting in the offsider being transported to the surface and then airlifted to hospital for treatment.

Initial information indicates the injured worker was engaged as a concrete truck driver and was tasked with assisting the Jumbo operator for several days before, and on the day of the incident.

# Investigation information release IIR23-06

Figure 1: Jumbo drill rig DD022 at the incident scene



Figure 2: View of the Jumbo booms from the operator cabin as found by investigators



## Investigation information release IIR23-06

Figure 3: Drill steel inserted into coupling on the righthand drill

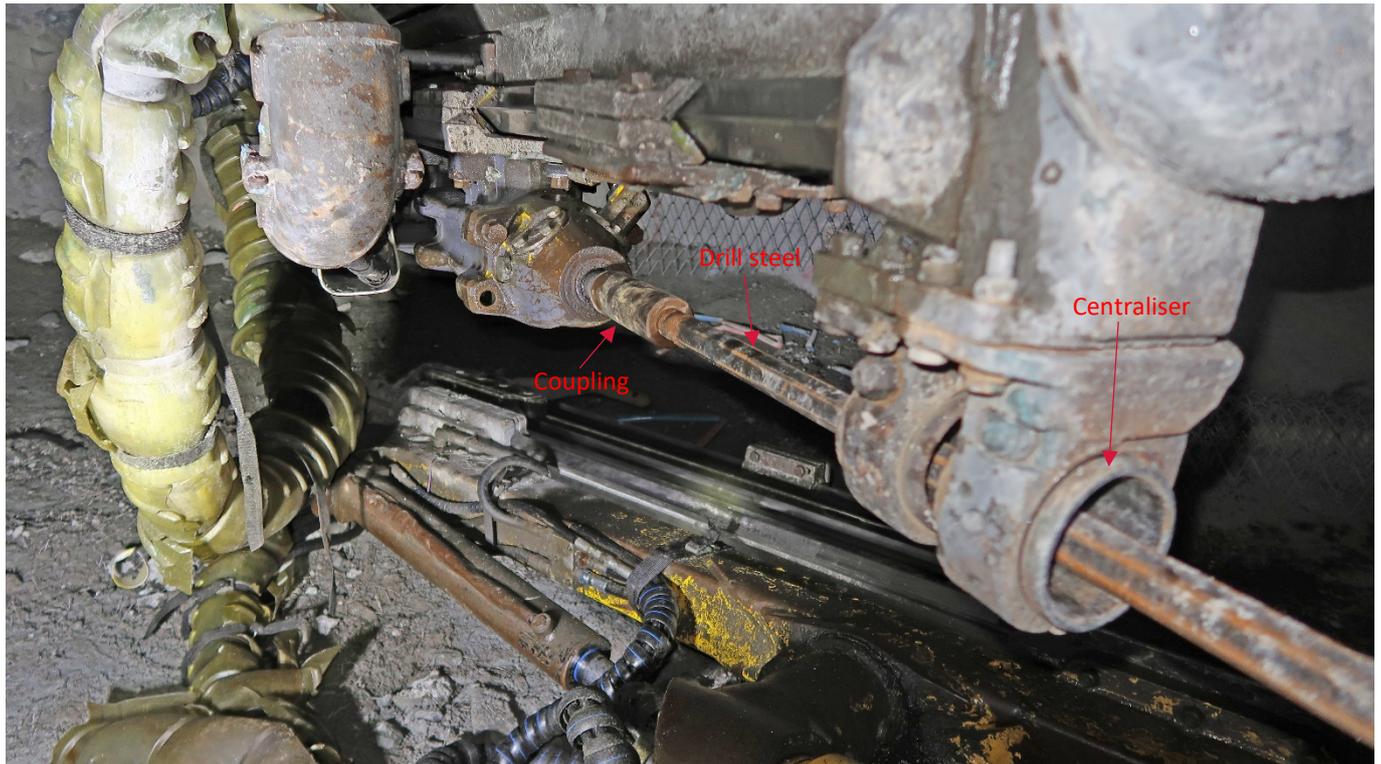
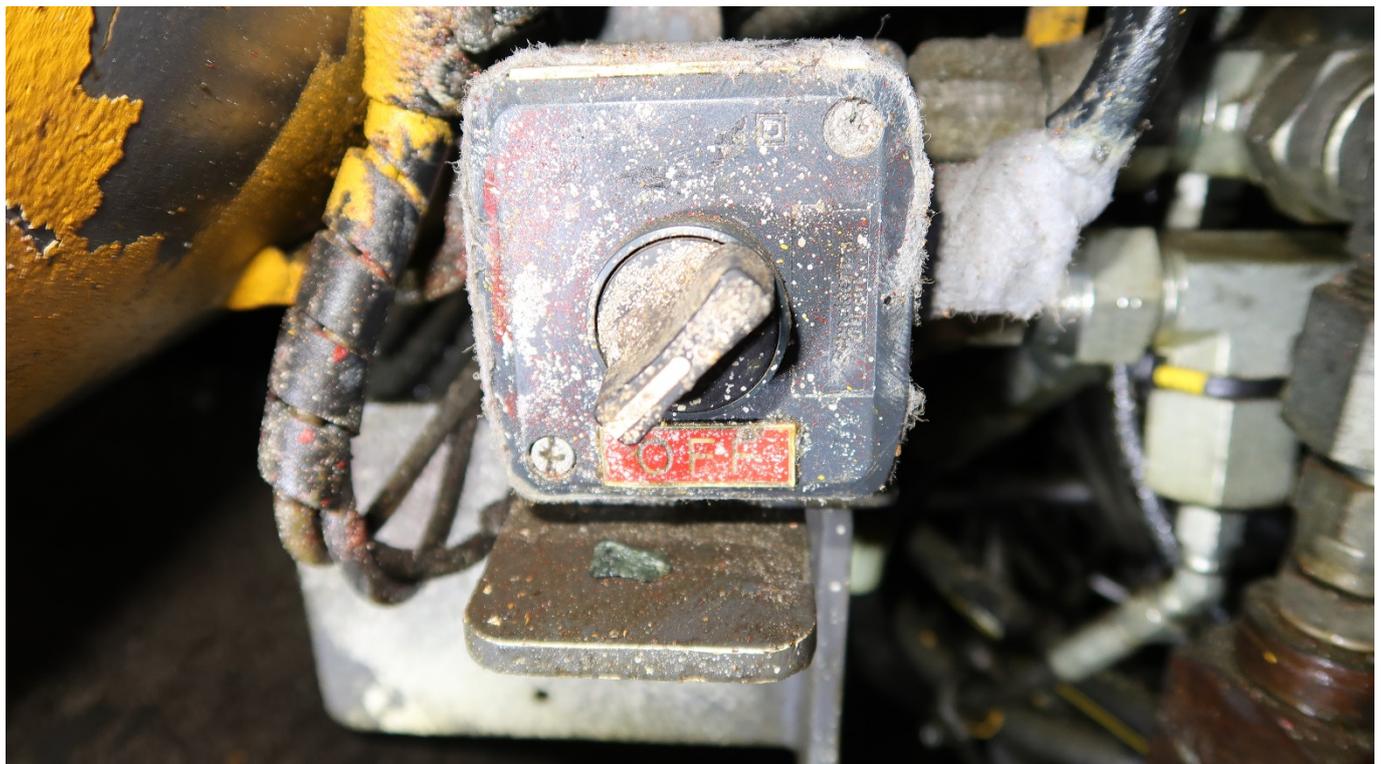


Figure 4 Immobiliser switch on the front left side of the Jumbo with isolation switched off



# Investigation information release IIR23-06

## The investigation

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

- system of work at the mine for changing drill components on a Jumbo drill rig
- operation and mechanical condition of the Jumbo drill rig, including isolation points
- instruction, training, experience, and supervision of workers
- adequacy of risk assessments, work instructions and procedures relevant to the incident
- work practices of the Jumbo operator and offsider as well as other Jumbo operators and offsiders.

The mine operator and other parties are assisting with the investigation. A report will be published when the investigation is concluded.

## Safety information

Entanglement in moving parts of mobile plant is a known risk to the safety of workers. Isolation should always be implemented before attempting to remove, change or insert components, including drill steels.

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.

In particular, mine operators and contractors must:

- implement a safe system of work that requires workers to isolate plant before attempting to remove, change or insert components, including drill steels
- provide workers with adequate instructions and training about how to control risks to health and safety associated with changing components on mobile plant, including Jumbo drill rigs, that is commensurate with their experience and the risk
- ensure that isolation points on mobile plant are functioning, clearly marked and easily accessible.

Workers are reminded of their duty to take care for their own health and safety and that of their co-workers. They must also comply with reasonable work instructions, policies and procedures.

In particular, workers must:

- isolate Jumbo drill rig booms when working on or near the booms
- be aware that removing, changing or inserting components into moving machinery presents a significant entanglement risk
- ensure they comply with the mine operators' safe work procedures, hazard identification and risk management processes.

## Further information

Please also refer to the following guidance materials:

- [MDG 15 - Guideline for mobile and transportable plant for use at mines other than underground coal mines](#)
- [MDG 35 – Guideline for bolting and drilling plant in mines](#)
- [MDG 40 - Guideline for hazardous energy control \(isolation or treatment\)](#)
- [Compliance priorities outcomes - Drill rigs in metalliferous mines, December 2018](#)

# Investigation information release IIR23-06

- [Safety bulletin - Safe systems of work on Jumbo and other drill rigs, November 2018](#)
- [Safety alert - Miner's arm injured using drill rig, March 2008](#)
- [Safety alert - Drill rigs and serious injuries, April 2005](#)

## 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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