

Investigation information release

Date: September 2023

Serious injury of a worker performing maintenance work on a mobile screen

Incident date: 28 August 2023

Event: Serious injury of a worker while assisting with belt tracking of a mobile screen

Location: Mt Magometon Quarry

Overview

A worker assisting with tracking the belt on a mobile screen was seriously injured when his arm became entangled in the screen's rotating tail drum.

The mine

Mt Magometon Quarry is a hard rock quarry about 25 kilometres east of Coonamble in the central west of NSW. The quarry is operated by Coonamble Shire Council. Several workers, including the injured worker, are employed by a contracting company, which provides mobile crushing services to the quarry.

The incident

Two of the contractors' workers were tasked with conducting maintenance tasks on various mobile screens at the site. In the early afternoon, the workers advised their supervisor (managing director of the contractor) that they were going to track the belt on a mobile screen identified as screen 7. Their supervisor left the site to travel into Coonamble to pick up some items. The quarry operator's nominated quarry manager was not on site on the day of the incident. The 2 workers began tracking the belt on screen 7.

While undertaking the task, one of workers was in proximity of the right-hand side of the screen toward the rear of the item of plant. The screen was energised with its conveyor operating. The worker's arm became entangled in the rotating tail drum of the screen, pulling the worker into the drum up to his shoulder.

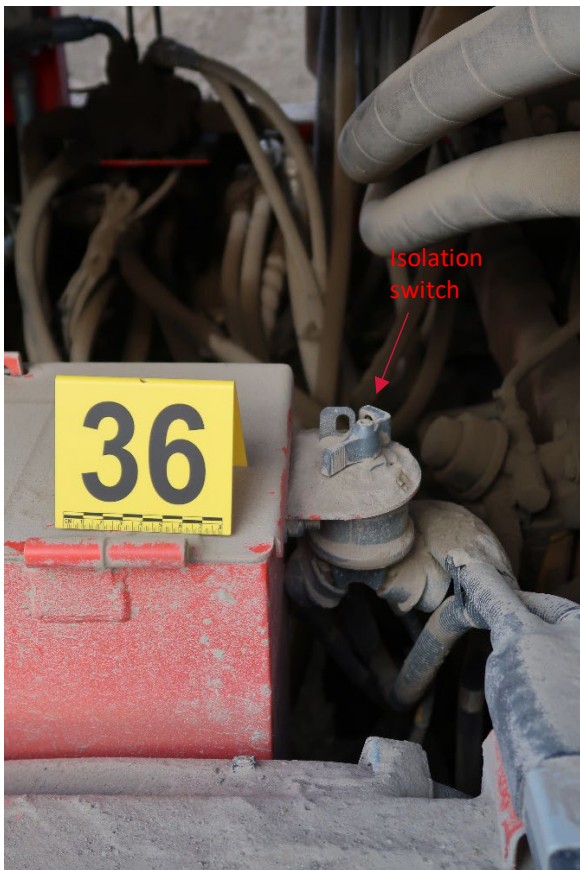
An emergency response was activated. The injured worker was trapped for several hours until emergency services and a medical team released him. The worker's arm was amputated as a result of the incident. The worker was transported to the entrance of the quarry and then airlifted to hospital.

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Figure 1: Mobile screen (screen 7) at the incident scene



Figure 2: Screen 7's isolation switch as found by investigators attending the scene in the 'on' position



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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 quarry for tracking conveyor belts on mobile screens
- operation and mechanical condition of the mobile screen, including guarding of the tail drum, functionality of isolation points and e-stops
- instruction, training, experience, and supervision of workers
- adequacy of risk assessments, work instructions and procedures relevant to the involved plant and equipment and task being performed at the time of incident including isolation
- adequacy of the quarry operators implemented safety management system including control plans and associated procedures governing management and supervision of contractors and introduction of mobile plant to site
- work practices of the quarry workers regarding maintenance activities on mobile screens.

The quarry operator, contractor other parties are assisting with the investigation. A report will be published at the conclusion of the investigation.

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 adjust components or perform maintenance.

Quarry 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, quarry operators and contractors must:

- implement a safe system of work that requires workers to isolate plant before attempting to remove, change or adjust components or perform maintenance
- provide workers with adequate instruction and training about how to identify and control risks to health and safety associated with performing maintenance on mobile plant, including mobile screens, that is commensurate with their experience and the risk
- ensure that any fixed conveyor guards and covers required to be removed during maintenance tasks are reinstalled prior to the plant being re-energised and operated
- ensure that isolation points and e-stops on mobile plant are functional, 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 conveyors when working on or near the conveyor
- ensure that any fixed conveyor guards and covers required to be removed during maintenance tasks are reinstalled prior to the plant being re-energised and operated
- be aware that being in proximity to unguarded rotating components of machinery presents a significant entanglement risk
- ensure they comply with implemented safe work procedures, hazard identification and risk management processes.

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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 40 - Guideline for hazardous energy control \(isolation or treatment\)](#)
- [SafeWork NSW Code of practice – Managing the risks of plant in the workplace](#)
- [SafeWork NSW Plant, Equipment and Machinery Energy Isolation Guidelines](#)

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
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