

# INVESTIGATION INFORMATION RELEASE

# **Fatality**

Incident date 3 April 2017

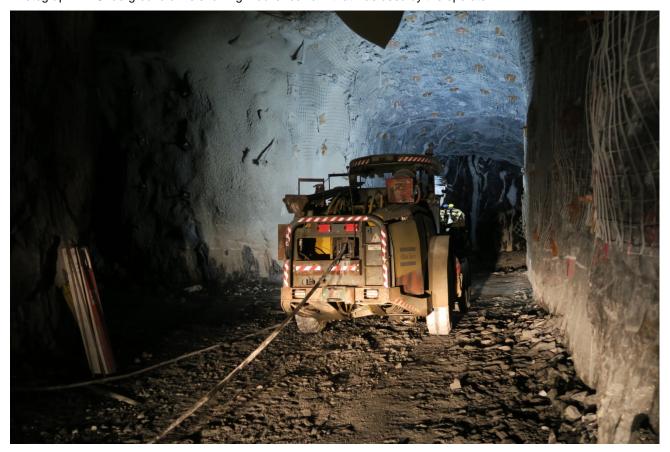
**Event** Fatality in underground metalliferous mine

**Location** Peak Gold Mines, Cobar, NSW

## Overview

A worker operating a mobile rock drill underground reported feeling unwell and lost consciousness while being transported to the surface. The worker died despite the efforts of his co-workers and ambulance officers to resuscitate him.

Photograph 1: Underground drive showing mobile rock drill that was used by the operator.



#### The mine

Peak Gold Mines Pty Ltd operates the Peak Gold Mines, which are nine kilometres south east of Cobar, NSW. Peak Gold Mines consist of several underground gold and copper deposits: the Perseverance, Peak, New Occidental, Chesney and New Cobar. Four of these have active mines. There is also a copper and gold processing plant on site.

The incident occurred underground at the Perseverance mine. A shaft and decline roadway is used to access the Perseverance ore body where copper and gold bearing ore is mined by the method of bench stoping.

Gold produced from the processing plant is sold to the Perth mint, with the copper concentrate sold to Asian markets.

# The contractor

Jemrok Pty Ltd, a mining services company based in Tasmania, is contracted by Peak Gold to undertake development works at the Perseverance mine. In addition to other large mobile plant, Jemrok uses mobile drill rigs known as Jumbos to undertake drilling and bolting works.

## The incident

The incident occurred at 2.40 pm on 3 April 2017.

The contract worker, aged 36, was operating a Jumbo alone in a development road on the 9300 level about 900 metres below the surface when he reported over the mine's two-way radio system that he was feeling unwell. He requested that someone collect him.

A nearby worker attended the 9300 level and transported him to the crib room in a light vehicle. He was then driven to the surface. On the way to the surface he lost consciousness and stopped breathing. He was given cardio-pulmonary resuscitation (CPR) on the way to the surface.

On the surface, mine emergency response personnel continued CPR and applied a defibrillator in attempts to resuscitate him. NSW Ambulance transported him to Cobar District Hospital where further attempts to resuscitate him were unsuccessful.

#### The investigation

NSW Police and NSW Ambulance Service responded to the incident.

The Resources Regulator responded and has commenced an investigation to determine the cause and circumstances of the incident. Preliminary investigations found the work environment at the 9300 level to be hot and humid. The mine operator and contractor are cooperating with the investigation. An investigation report will be prepared for the Secretary of Department of Planning and Environment and the NSW Coroner.

The cause of death is being considered by the NSW Coroner.

# Safety observations

The risks to health and safety regarding hot and humid working environments are well known. Working in intense heat can raise normal body temperature and lead to serious dehydration, heat stroke and possible death.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> SafeWork NSW, *Recognising and treating heat-related illness at work* [factsheet], available at http://www.safework.nsw.gov.au/\_\_data/assets/pdf\_file/0008/114101/treating-heat-related-illness-8496.pdf

Mine and petroleum site operators 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* (NSW) and regulations.

The management and control of atmospheric conditions in underground mines is vital. If risks associated with extreme heat exist at an underground mine, adequate control measures must be implemented to manage heat stress (heat-related illness) in places where people work or travel where the wet bulb temperature exceeds 27° Celsius.<sup>2</sup>

Heat stress management plans should make provision for pre-shift and during-shift temperature testing of workplaces and dehydration testing of workers. Workers should be adequately supervised and actively monitored for signs of dehydration and heat-related illnesses. Regular crib and rest breaks should be taken to ensure workers can be adequately rehydrated. Heat stress management plans should also prescribe circumstances for the withdrawal of workers from hot and humid conditions, which should be supported by the regular testing of workplace conditions.

Where practicable, mobile plant operating in extreme heat conditions should be air-conditioned to eliminate or minimise the exposure of operators.

Information and training should be provided to workers about heat stress and its effect on health and safety. Training should also educate workers about the prevention and management of heat stress. First aid training should include appropriate treatment strategies for heat illnesses and heat stroke.

#### **Further information**

- SafeWork NSW factsheet: Hot and cold work environments
- Safe Work Australia code of practice: Managing the work environment and facilities
- US National Institute for Occupational Safety and Health (NIOSH) webpage: Heat stress

## About this information release

The Resources Regulator has issued this information to draw attention to the occurrence of a fatality in the mining industry. Investigations are ongoing and further information may be published as it becomes available.

The information contained in this publication is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Planning and Environment or the user's independent adviser. All photographs were taken by the Major Investigations and Emergency Response Unit.

Information about the Major Investigations and Emergency Response Unit and its publications can be found at: <a href="resourcesandenergy.nsw.gov.au/miners-and-explorers/safety-and-health/about-us/major-investigations">resourcesandenergy.nsw.gov.au/miners-and-explorers/safety-and-health/about-us/major-investigations</a>
For information about health and safety regulation for mine sites contact a mines inspector at one of our local offices <a href="resourcesandenergy.nsw.gov.au/miners-and-explorers/safety-and-health/about-us/mine-safety-offices">resourcesandenergy.nsw.gov.au/miners-and-explorers/safety-and-health/about-us/mine-safety-offices</a>

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<sup>&</sup>lt;sup>2</sup> Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 (NSW) cl 38.

<sup>3</sup> Department of Planning and Environment, Resources Regulator, April 2017