

March 2023

Response to stakeholder feedback

Technical reference guide: Withdrawal and escape from underground coal mines

The Resources Regulator developed the technical reference guide (TRG) Withdrawal and escape of underground coal mines in consultation with the Mines Rescue Working Group. The Regulator circulated the Withdrawal and escape TRG for targeted consultation in 2021. This document summarises the issues raised by stakeholders and details the Regulator's responses.

The feedback has been categorised into themes, and the Regulator's responses are set out below:

1 More information on fleeing serious incidents and hazardous environments required in the TRG

A stakeholder expressed the view that further information on fleeing serious incidents and hazardous environments is required in the TRG. As it has guidance orderly evacuation on instruction, however little information on fleeing a hazardous situation without instructions. Those escaping the event have no such choice but to flee the area taking advantage of the prior resources supplied, (i.e., escape apparatus and instruction and training).

Resources Regulator response

An emergency escape differs from a withdrawal or orderly evacuation due to the proximity or imminence of the danger posing the threat to safety. The TRG covers withdrawal in sections 1 and 2, and emergency escape in sections 3 and 4.

The main purpose of this TRG is to provide guidance on the provision of the pre-planned and supplied training and resources. It is likely that those escaping have no option but to rely on pre-planned and supplied training and resources. The Regulator believes that the TRG provides adequate guidance on emergency escape.

2 Adequacy of controls for use of Oxy SR Units ACARP – C10002 (2000)

A stakeholder referred to ACARP – C10002, 2001 Reference "World-Wide Review of Underground Mine Emergencies, Executive Summary" commented that 40% of escapees with Oxy SR Units did not reach a place of safety". Queensland Level 1 exercises have confirmed a similar statistic. This has been considered and controls adopted include training in the use of escape apparatus, practice in the change-over of apparatus and processes to ensure equipment is fit for use. These controls are not considered adequate as despite them, it is expected that some people escaping will not reach a place of safety without assistance.

Resources Regulator response

The ACARP study C10002 published October 2000 is 'point in time'. Training and escape experience in NSW has improved since the study was completed.

In NSW Legislation has imposed stricter legislative requirements in response to events and historical experience such as the 2006 Sago mine disaster in the United States. These include requiring the use of oxygen producing self-contained self-rescuers (SCSR) during training to simulate working with an SCSR, training in a simulated work environment, increased training frequency requirements, and providing hydration.

This TRG deals with emergency escape and does not cover rescue, including aided escape.

3 Amend trigger levels in sections 2.4.1 and 2.4.2

A stakeholder recommended the wording in dot point 4 Trigger levels, 2.4.1 be modified to something like “recognise the normal or background conditions and both actual and relative/percentage changes and trends to the conditions”.

The stakeholder also recommended in 2.4.2. Main risks, after dot point 2 insert another dot point that reads “trigger level is not set with relative/percentage reference to the normal or background conditions so possible threat is not identified at the earliest opportunity”.

Resources Regulator response

The Regulator agreed to amend the TRG and insert into section 2.4.2: “trigger level is not set with relative/percentage reference to the normal or background conditions so possible threat is not identified at the earliest opportunity” and change the fourth dot point in section 2.4.1 to draw attention to the need for awareness of relative changes (not just absolute changes) to background conditions.

4. Include reference to the International Council on Mining and Metals (ICMM) Critical control management good practice guide

A stakeholder suggested referring to the International Council on Mining and Metals (ICMM) Critical control management good practice guide.

Resources Regulator response

The Regulator agreed to reference the ICMM good practice guide in the TRG.

5. Use of compressed air breathing apparatus (CABA) for in-seam response

The MDG 1020/22 and Guidelines for in-seam response using CABA for events when life is at risk is still available in the Regulator’s historical catalogue web page. Mine operators may still refer to the MDG as part of its in-seam response as necessary.

The TRG recognises the duty of mine workers to learn and understand escape systems. The TRG is focussed on withdrawal and escape rather than aided rescue. Training and familiarity with routes, equipment and procedures is required by law. Escaping workers should not be burdened with carrying equipment and should not be expected to assist others when escaping. Risk assessment of the escape system requirements should identify any escape aides required. There are many in seam responses where CABA is not required.

6. Up-to-date references the (MPS) Regulation 2022

Resources Regulator response

The Regulator has updated the TRG to reflect the remade WHS (MPS) Regulation 2022.

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