

Safety Bulletin

Date: February 2023

Ongoing monitoring and reporting for escape breathing apparatus

This safety alert provides safety advice for the NSW mining industry.

Issue

In late 2022, the Resources Regulator was alerted that some operators of underground coal mines may not have been complying with testing requirements for self-rescuers in accordance with the Technical Reference Guide (TRG) for *Escape breathing apparatus for underground mining applications – standards for design and ongoing monitoring* (the guide).

The Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 imposes the following requirements:

- Section 103 (1) requires that an appropriate self-rescuer is provided to people underground where there is a risk of an irrespirable atmosphere (except for opal mines).
- Section 187 requires that breathing apparatus to assist escape including self-rescuers are required to be design registered. Conditions listed in the design registration reference the examination and testing requirements stipulated in the technical reference guide, which apply to self-rescuers upon initial supply and while in-service.

In addition, clause 44 (3) (b) of the Work Health and Safety Regulation 2017 requires that personal protective equipment (PPE) is 'maintained, repaired or replaced so that it continues to minimise risk to the worker who uses it'.

The Regulator issued a [fact sheet](#) in October 2020 that informed mine operators of our position in relation to how mine operators should meet their obligations to ensure that self-rescuers are tested and maintained appropriately. This fact sheet specifically detailed the relevant sections of the guide.

Different testing regimes are required for self-contained chemical and compressed oxygen apparatus, and carbon monoxide filter self-rescuers. While a summary of the requirements is provided below the reader is referred to the guide which provides additional detail.

Table 1: Retesting schedule for in-service CO filter rescue units

| Age of unit (years) | Test schedule |
|---------------------|-------------------------|
| 1 | No test |
| 2 | No test |
| 3 | No test |
| 4 or greater | Test required each year |

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| Age of unit (years) | Test schedule |
|---|--------------------------------|
| Manufacturer's recommended service life | Remove in month of manufacture |

Table 2: Retesting schedule for in-service chemical oxygen and compressed oxygen apparatus

| Age of unit (years since manufacture) | Test schedule |
|---|--------------------------------|
| 1 | No test |
| 2 | Test required |
| 3 | No test |
| 4 | Test required |
| 5 | No test |
| 6 or greater | Test required each year |
| Manufacturer's recommended service life | Remove in month of manufacture |

Investigation

Notices were issued to the 23 operators in NSW underground coal mines to determine the status of compliance with the directions provided by registration holders regarding the testing and examination of self-rescuers in accordance with sections 5 and 6 of the guide.

The notices revealed that 2 mines had not complied with the requirements for examination or testing of self-rescuers. Another 9 mines had not fully complied with the requirements.

In all cases, the detected non-compliance was the failure to submit the required number of self-rescuer units for testing in accordance with the testing frequencies prescribed in the guide. This failure was evident from information provided by mine operators and from testing facilities.

Recommendations

All mine operators are reminded of their obligations to maintain compliance with the conditions of the design registration for the specific make and model of self-rescuer that is used at their mine. It is recommended that operators review and update the systems and procedures that are in place at their operations to ensure compliance with the guide, the relevant design registrations and legislation.

While several operators have group testing arrangements or supplier/provider testing arrangements as allowed for in Section 1.10 (b) and (c) of the TRG, operators are reminded of their individual responsibility to maintain compliance to the registration holder's examination and testing requirements specified in the respective design registration and the guide.

Note: Please ensure all relevant people in your organisation receive a copy of this safety alert and are informed of its content and recommendations. This safety bulletin should be processed in a systematic manner through the mine's information and communication process. It should also be placed on the mine's common area, such as your notice board where appropriate.

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