

# Fact sheet

## Control plan – ventilation control plan – acute exposure to irrespirable atmospheres

August 2024



The Resources Regulator has developed a broad-brush risk assessment and a program of bowties to review principal hazard and control plan topics.

The bowtie program identified the material unwanted events (MUE) and critical controls to prevent serious injury or death of mine workers.

The bowtie for the control plan topic of ventilation control plan identified one MUE and the critical controls for assessment programs. This fact sheet provides information related to the assessment program focussing on the MUE – acute exposure to irrespirable atmospheres

### Control plan – ventilation control plan (VCP)

#### MUE – acute exposure to irrespirable atmospheres

#### MUE critical controls

The Regulator’s assessment program will focus on the following critical controls to prevent an acute exposure to irrespirable atmospheres:

- Mine design to manage contaminant generation and/or interaction with contaminants to within safe limits.
- Workers restricted / removed from areas with irrespirable atmospheres.
- Ventilation flow rates controlled to remove or minimise contaminants.
- Pre-drainage and gas drainage (irrespirable gas reduction).



Image by coal services

#### Considerations

Mine operators should consider the material unwanted events above as a minimum and ensure that the review of critical controls to prevent serious injury or death is included within the site ventilation control plan and associated documentation.

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Other relevant safety alerts, safety bulletins and information resources published by the Resources Regulator:

Date published	Reference	Title
December 2023	SB23-10	<u>Methane gas incidents occurred in NSW coal mines</u>
November 2023	Compliance Priority Report	<u>Air quality – ventilate workplace - Metalliferous underground mines - July 2023 to October 2023</u>
February 2023	SB23-02	<u>Ongoing monitoring and reporting for escape breathing apparatus</u>
April 2023	IIR23-02	<u>LHD operator exposed to methane and carbon dioxide gas within unventilated section of underground roadway</u>
January 2023	Case Study Report	<u>Between 2 and 4 December 1896, at Stockton Colliery in NSW eleven men died from inhaling poisonous gas in a chain of events</u>
January 2023	Case Study Report	<u>On 23 March 1887, Bulli Colliery experienced a gas explosion which blew out of the tunnel mouth, carrying with it an unconscious boy and killing 81 men and boys.</u>
August 2022	Compliance Priority Report	<u>Underground coal gas management January 2022 to March 2022</u>
October 2021	Consolidated Report	<u>Fire or explosion – maintain non-explosive atmosphere – underground coal mines - June 2020 to April 2021</u>
October 2021	SB21-07	<u>Polyurethane Resin selection</u>
June 2021	TRG - Ventilation Control Plan	<u>Technical Reference Guide Ventilation Control Plan - Guide for the development of a ventilation control plan for underground mines</u>
July 2018	Guide	<u>Airborne contaminants principal hazard management plan</u>
March 2018	SA18-04	<u>Workers withdrawn after methane frictional ignition</u>
November 2016	SA16-08	<u>Workers exposed to elevated levels of methane</u>

References	
Program type	CP-1601
Control plan	Ventilation control plan
MUE number	MUE01

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