

# Fact sheet

## Principal hazard – fire and explosion – mobile plant

November 2024



The Resources Regulator has developed a broadbrush 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 principal hazard of fire and explosion identified 3 MUEs and the critical controls for assessment programs. This fact sheet relates to the assessment program focussing on the MUE – uncontrolled fire or explosion mobile plant.

## Principal hazard – fire and explosion

### MUE – uncontrolled fire or explosion mobile plant



## MUE critical controls

The Regulator’s assessment program will focus on the following critical controls to prevent an uncontrolled fire or explosion on mobile plant:

- surface temperature reduction
- emergency response
- fit-for-purpose design
- fit-for-purpose fuel dispensing (equipment and process)
- fit-for-purpose design of overhead lines

## 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 principal hazard management plans and associated documentation.

Other relevant guidance information including codes of practice, safety alerts, safety bulletins and reports published by the Regulator:

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DATE PUBLISHED	REFERENCE	TITLE
Updated 2024	Regulator website	<a href="#"><u>Fires on mobile plant safety</u></a>
May 2024	Consolidated report	<a href="#"><u>Licensed recognised service facility (RDF) assessment December 2021 to May 2023</u></a>
February 2024	Fires on mobile plant 2022-23	<a href="#"><u>Annual report: Fires on mobile plant 2022-2023</u></a>
29 February 2024	Investigation release	<a href="#"><u>IIR24-01 Two workers injured when truck tyre explodes</u></a>
16 November 2023	Safety bulletin	<a href="#"><u>SB23-09 Incidents show poor response to tyre fires on heavy earth moving machinery</u></a>
17 February 2023	Safety bulletin	<a href="#"><u>SB23-01 Explosion risk of battery units for underground battery electric vehicles</u></a>
October 2022 (updated)	NSW code of practice	<a href="#"><u>Mechanical engineering control plan</u></a>
27 October 2022	Safety alert	<a href="#"><u>SA22-06 Operator unable to activate fire suppression system during emergency</u></a>
October 2022	Fires on mobile plant	<a href="#"><u>Report: Fires on mobile plant April – June 2022</u></a>
October 2022	Fires on mobile plant	<a href="#"><u>Report: Fire on mobile plant January – March 2022</u></a>
September 2022	Safety bulletin	<a href="#"><u>SB22-12 Fire occurring on mobile manufacturing unit trucks</u></a>
July 2022	Fires on mobile plant	<a href="#"><u>Report: Fires on mobile plant October – December 2022</u></a>
29 June 2022	Safety bulletin	<a href="#"><u>SB22-09 Mobile plant and vehicle fires associated with diesel exhaust treatment</u></a>
March 2022	Fires on mobile plant	<a href="#"><u>Report: Fires on mobile plant July – September 2021</u></a>
2 December 2021	Safety bulletin	<a href="#"><u>SB21-11 Fire occur after serving mobile plant</u></a>
September 2021	Fires on mobile plant	<a href="#"><u>Report: Fires on mobile plant January - March 2021</u></a>
April 2020 (updated)	Mining design guideline	<a href="#"><u>MDG 15: Guideline for mobile and transportable plant for use at mines other than underground coal mines</u></a>
September 2019	Fact sheet	<a href="#"><u>Fact sheet: Testing of fire-resistant hydraulic fluids and materials</u></a>

### References

Program type	PH-0202
Control plan	Principal hazard – uncontrolled fire or explosion -mobile plant
MUE number	MUE021

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