

# FACT SHEET

## Planned Inspection Program - Fire or Explosion - Mechanical – Surface/underground metalliferous mines and large quarries

July 2021



The principal hazard of fire or explosion has many elements which exist within the mining environment and can potentially cause serious and/or fatal injuries to workers if not controlled effectively. This fact sheet is primarily based on the critical controls for mechanical risks within both surface and underground metalliferous environments, as well as large quarries. Each critical control should be considered by mine operators when assessing the risk at their operation.

As a result, the NSW Resources Regulator is commencing a program of planned inspections and targeted assessments which will be focussing on the below criteria and ensuring compliance across the metalliferous industry and tier 1 quarries in NSW.



### Minimise friction and control hot surfaces

Heat that transfers to external surfaces of plant cannot ignite fuel.



### Non-metallic material properties

Non-metallic materials do not propagate fire or produce hazardous products of combustion.



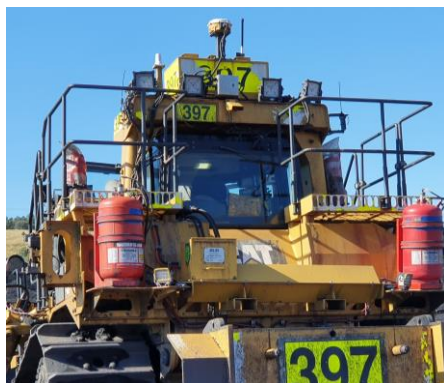
## Manage fuel sources

Limit accumulation of unnecessary fuel in proximity to a potential source of ignition.



## Flammable fluid containment

Flammable fluid containment prevents contact with an ignition source.



## Automatic fire suppression

Fire systems automatically detect, alarm and suppress fires to provide opportunity for escape.

## Considerations

Mine operators should consider the above criteria as a minimum and ensure that such information is included within their respective principal hazard management plans and associated documentation. Following investigations into fire or explosion incidents which have a mechanical focus, it is evident that non-compliance with these key control measures have contributed to incident outcomes, which has caused both severe and fatal injuries to workers. When identifying and implementing control measures, mine operators are also reminded to follow the hierarchy of controls to ensure health and safety risks are minimised, so far as is reasonably practicable.

**Other relevant safety alerts and bulletins published by the Regulator:**

| DATE PUBLISHED | REFERENCE            | TITLE  |
|----------------|----------------------|--|
| March 2021     | Quarterly Report     | <a href="#">Fires on Mobile Plant: July – September 2020</a>             |
| May 2020       | Investigation Report | <a href="#">Report into a haul truck fire at the Tritton Copper Mine</a> |
| 18 May 2020    | SB20-02              | <a href="#">Fire suppression system fails to discharge</a>               |
| 07 Nov 2019    | SB19-14              | <a href="#">Conveyor pulley failures initiate fires</a>                  |
| October 2019   | Position Paper       | <a href="#">Preventing fires on mobile plant</a>                         |
| 26 Apr 2019    | SA19-02              | <a href="#">Truck catches fire underground</a>                           |
| 05 Jul 2018    | SA18-08              | <a href="#">Underground mine fire initiates emergency response</a>       |
| September 2017 | Analysis Report      | <a href="#">In-service fires on mobile plant</a>                         |
| 26 Nov 2013    | SB13-05              | <a href="#">Underground fires</a>  |

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