

# SAFETY BULLETIN

DATE: JUNE 2022

## Issues found on forklifts during mine site assessments

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

### Background

NSW Resources Regulator inspectors have observed maintenance and operational issues involving forklifts operating on NSW mines, during recent assessments.

Forklifts are a well-known, high risk plant. There is a need for operators to have an up-to-date high risk forklift license (LF or LO endorsement depending on the type of machine) and training, to be familiar with the controls and to know the forklift's limitations before operating it. Because forklifts are manoeuvrable, they are designed to be compact and, when carrying loads, they can become unstable under certain conditions.

Not maintaining a forklift correctly can increase the risk of worker injury or harm. Likewise, not undertaking operator pre-start checks and standing it down when appropriate, as well as operating the forklift outside of its design parameters can increase the risk profile for the machine.

### Observations

Inspectors noted several issues during assessments about forklifts operating at NSW mine sites recently:

- Worn and damaged hydraulic hoses.
- Extremely worn and/or damaged tyres.
- Underinflated tyres where they are pneumatic.
- Missing wheel nuts and their security tabs (where used).
- Debris in cabins/operator compartments and fines build-up around operator pedals.
- Rubbish and slings sitting unsecured on the forklift that could become projectiles.

- Damaged operator seats and seat belts.
- Operators not wearing seat belts while driving.
- Non-existent or ineffective guarding – able to make contact with rotating parts such as fan blades.
- Unreadable/missing load labels and safety decals.
- Worn out/missing operator pedal rubber.
- Worn, damaged and/or buckled/deformed tynes.
- Damaged lights (including protective diffusers and flashers) and horn.
- Fire extinguishers not maintained – lack of test tag stamping.
- Operator pre-starts not completed or workers failing to identify items requiring attention and/or standing down of the machine.
- Operators reporting issues multiple times on pre-starts over extended periods of time and these not being addressed.

*Figure 1 Damaged hydraulic hoses*



Figure 2 Worn tyres and damaged lights



Figure 3 Guarding. Rotating parts contactable through the rear



Figure 4 Debris and unsecured items in a forklift cabin



## Recommendations

Mine operators must ensure:

- forklifts used at a mine workplace are fit for purpose. Consult with workers and safety and health representatives (where possible) to determine their suitability. Forklifts must be operated within the manufacturer's design parameters.
- forklifts are regularly inspected, serviced and maintained to original equipment manufacturer (OEM) specifications by trained and competent personnel.
- forklift operators must have a current high risk work license for the appropriate type of machine (mostly LF). In addition, mine operators must ensure that forklift operators are also provided with additional training, instruction and information on the equipment operation, hazards, risks and control measures relevant to the workplace.
- pre-start inspections should be undertaken and documented before using a forklift. The machine must be stood down whenever safety critical functions fail a pre-start examination. Report all other defects to supervisors for defect management.

- There are limitations with respect to forklift visibility while carrying and moving loads. Speed, load size, ground conditions including ramps and weather may come into play with respect to pedestrian interaction. Positive communications must be invoked between the pedestrian and forklift operator if the pedestrian needs to approach a working machine or area.

## Example of issues that pre-start checks should consider

- Lift and tilt systems – mast should not be bent, worn or cracked. The tilt lift and lower should operate smoothly. Hydraulic lines and hoses should be undamaged and secured in guides. Cylinders and hoses should be checked for damage and leaks. Chains, cables and limits must be in good order.
- Check steering and brakes, fluids and operating controls (labelled, not lose or binding).
- Examine tyre condition and wear, damage, inflation (pneumatic type) and wheel rims for damage and any missing nuts and their security tabs (if used).
- All warning devices, load rating plates and safety decals must be legible and operational.
- Fork arms and attachments should be inspected for damage, adjustment, deformation and wear.
- The fire extinguisher must have an in-date test label.
- Rollover protection (ROPS and FOPS) and egress steps and handrails should be in good order and secure. Chassis and glass (where fitted) should be in good order with wipers operating and effective where they are installed.
- The seat and seat belts should be in good order and operate freely and reliably.
- Cabin or operator compartment should be free of debris and there are no unsecured objects stored in the cabin/compartment or sitting on the machine itself.
- The battery isolator should be functional and able to be locked in the off position.

## NSW Resources Regulator safety alerts:

[SA18-16 Tyre falls from tyre handling forklift](#)

[SA13-09 Seatbelt saves forklift driver](#)

[SA00-03 Operator crushed by overturned forklift](#)

**NOTE:** Please ensure all relevant people in your organisation receive a copy of this safety bulletin 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.

Visit our [website](#) to:

- find more safety alerts and bulletins
- use our searchable safety database
- sign-up to receive mine safety news.

© State of New South Wales through Regional NSW 2022. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute Regional NSW as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (June 2022) and may not be accurate, current or complete. The State of New South Wales (including Regional NSW), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

### DOCUMENT CONTROL

<b>CM9 reference</b>	RDOC22/81660
<b>Mine safety reference</b>	SB22-08
<b>Date published</b>	20 June 2022
<b>Authorised by</b>	Chief Inspector Office of the Chief Inspector