Loading shovel tyre explosion

WHAT HAPPENED

A front end loader was digging into a quarry aggregate stockpile when its front offside tyre suddenly exploded. No other vehicles or pedestrians were in the area and the operator was unharmed.

Site cctv footage shows a bulge develop on the sidewall of the tyre shortly before it exploded. Footage from earlier in the day appears to show (but not conclusively) some sidewall deformation already present.

No defects were reported when the operator carried out his daily pre-start safety checks.



Tyre exploding on video



Tyre bulge prior to explosion

LEARNING POINTS / ACTIONS TAKEN

- Always thoroughly inspect machine tyres when doing pre-start safety checks (and record it).
- Stay vigilant for signs of damage or defects during the shift. Look for signs of impact or destructive damage (bulges or deformation of the tyre sidewall or tread, exposed reinforcing wires, damage to wheel rims, loss of tyre pressure, etc.)
- If any significant damage is found – STOP - do not operate the machine, park it up and cordon the machine off until the tyre has been examined by a professional tyre fitter (earthmoving tyre specialist)
- Earthmoving tyres should be subject to regular inspection (and maintenance, as required) by a professional tyre maintenance company – The inspection frequency should be agreed with the service provider based on their professional recommendation and advice.
- Only professional tyre fitters are permitted to inflate earthmoving and LGV tyres on sites and must do so using a remote inflation device from outside the trajectory ‘danger’ zone using a safety inflation hose line.

LOCATION:	**QUARRY**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**MAINTENANCE & HOUSEKEEPING**	**DATE ISSUED:**	**27/01/2022 11:20:20**
SUB ACTIVITY:	**N/A**	**INCIDENT No:**	**03603**