NTWorkSafe

Safety Alert

Support of mobile plant on outriggers

The purpose of this Safety Alert is to highlight the potential risks associated with inadequate support under outrigger pads on mobile plant, particularly on poor ground where recent excavations have occurred, or the area has been filled which may result in the plant overturing.

Background

There was a recent incident in Queensland involving a 70 metre truck mounted Elevating Work Platform that overturned, resulting in a fatality. There have also been a number of recent incidents around Australia where mobile plant on outriggers have overturned.

Contributing factors

The contributing factors involving the overturning of plant on outriggers:

- Not setting up plant as per manufacturer's instructions, for example, short legging of outriggers where plant is not designed for short legging, or failing to de-rate the capacity of machine when short legged.
- Soft or unstable ground from recent excavations, rain, rising ground water, ground subsidence caused by nearby excavations, underground services and proximity to edges of creeks or river edges.
- The area of outrigger timbers or blocking under the pads not being adequate to spread the load/pressure for the ground conditions.
- The increase of pressure applied to ground underneath outrigger pads, for example, where a load is lifted by plant not being taken into consideration by plant operator.

Action required

- Employers must ensure their operators hold a relevant High Risk Work Licence and/or competency for the required plant.
- The employer must provide their operators with sufficient training instruction and supervision for their operator to make an informed assessment as to what ground support is required as part of their risk assessment. This should include documented procedures for the checking of the outrigger packing based on the plant specifications and site conditions. The procedures should also reference the manufacturer's information on loading applied to the ground and the expected bearing capacity of the site. It may be necessary to request site specific information to ensure the site is suitable for the plant.





- The operating instructions from the mobile plant manufacturer should always be followed.
 Manufacturers and/or their agents in Australia have a duty to supply information on any conditions necessary to ensure the plant is safe, this includes information on the loads imposed on the ground by outriggers and wheels. Where information is no longer readily available, a competent person such as a geotechnical engineer should be engaged to assist in developing appropriate information on ground support for the unit.
- Continually monitor outriggers during operation, for example, consider the use of spotter/s to monitor the outriggers.

For further information please refer to the following:

Legislation

• Work Health and Safety (National Uniform Legislation) Act and Regulations.

Guidance publications

Safe Work Australia

www.safeworkaustralia.gov.au/sites/SWA

- General Guide for Cranes 2015.
- Vehicle Loading Cranes Information Sheet 2015.
- Managing Risks of Plant in the Workplace Code of Practice 2013.

Contact details

Call us on: 1800 019 115

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For more information on work health and safety, go to NT WorkSafe's website at www.worksafe.nt.gov.au

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