

Road roller reverse travel

A road worker was fatally injured when struck by a multi-tired road roller during routine road repair activity.

The road roller was travelling in reverse and attempting to pass in close proximity to the worker who was performing a manual task behind another slow moving vehicle

The road roller, without warning, suddenly deviated from the intended direction of travel catching the road worker off-guard. No other workers were injured.



Details

There are many inherent hazards associated with road repair work, particularly where mobile plant is involved. These include multi-vehicle interaction and pedestrian-to-vehicle interaction. In many situations, traffic control is established to allow public vehicles to travel through or around the work site. This can restrict maneuverability for road repair vehicles within the work site and introduce additional hazards, particularly proximity to soft road shoulders or trees.

Road rollers generally operate in a forward and reverse motion to effectively and efficiently compact the road surface. Although the road roller has steering control, it may not be physically possible to turn the vehicle around at the end of every pass. The operator seat may not be centrally positioned which can reduce visibility between forward and reverse motion. Where the operator seat is fixed in a forward facing direction, then while reversing, the operator must look over their shoulder. When this activity is performed for long periods of time, operator fatigue and confusion may occur.

Explanation

Mobile plant operated too close to workers on foot (insufficient separation distance).

- Inadequate traffic management.
- No spotter used.
- Operator driving visibility restricted.
- Operator error or fatigue.
- Operator training inadequate.
- Operator competency inadequate for operating specific make and model of mobile plant.
- Malfunctioning or defective operational controls.
- Excessive speed.
- Adverse weather conditions.
- Defective audible warning device/s on the plant.

Safety Tips

- Areas of worker / plant congestion must be identified and plant movements controlled.
- Ensure plant operators are competent in the operation of the specific make and model of plant, not just the type of plant.
- Implement risk control measures to avoid unauthorised worksite access.
- Reversing travel direction of plant and vehicles should be kept to a minimum.
- Ensure plant and vehicle warning devices are operational and appropriate for the site conditions
- Any changes to plant movement plans must be communicated regularly to all site personnel, visitors and contractors.
- Ensure that operators who perform tasks which subject them to fatigue are changed at regular intervals.
- For road rollers that regularly operate in the reverse direction, where reasonably practicable, ensure that the operator seat (and operating controls) can swivel to face the direction of travel
- When purchasing new plant, ensure that the operator controls allow clear visibility in all directions of travel for which the plant will be used.
- Regularly inspect and test the emergency stopping features of plant.
- When operating procedures are being developed, consideration should be given to ensuring separation distances between workers and mobile plant are clearly defined.

AAPA has prepared this Safety Alert from industry safety alerts and incident reports to provide assistance to members and the public in general. This Safety Alert is a reference point and should be combined with other information sources, relevant government legislation and other industry related materials in risk and hazard identification and in developing safety practices, policies and procedures. v4