



# Wheeled loading shovels in waste and recycling

## Health and Safety Executive - Safety notice

**Department name:** EPD OPST Agricultural waste and recycling and vulnerable workers unit

**Bulletin number:** EPD1 - 2021

**Issue date:** 10/21

**Target audience:** Operators of wheeled loading shovels

**Issue:** This safety notice is to remind dutyholders who use these machines of the need to fully assess and actively manage the risk of vehicle-pedestrian collisions.

## Introduction

There have been nine fatal vehicle-pedestrian collisions in the past four years involving wheeled loading shovels. Six of these were in the waste and recycling sector while the remainder involved wood chip.

Some were due to poor forward visibility, while others resulted from reversing. Larger capacity buckets had been fitted to some machines, further reducing forward visibility.

This safety notice is to remind dutyholders who use these machines of the need to fully assess and actively manage the risk of vehicle-pedestrian collisions.

## Outline of the problem

Wheeled loading shovels are versatile machines, widely used in the waste and recycling sector. However, driver visibility is affected by various blind spots caused by the bucket (and load), the engine at the rear and the cab pillars. These can significantly reduce the driver's ability to see pedestrians and, to a lesser extent, other vehicles.

In recent years, fitting larger capacity buckets has become common practice where low-density material is being moved. It allows more to be carried in each load while remaining within the design capacity of the machine. These are available from the original equipment manufacturers (OEMs), as well as from the aftermarket supply chain.

However, this is likely to make forward visibility worse. Some manufacturers add 'visibility slots' or mesh at the top of the buckets to mitigate this problem, but evidence from investigations suggests these are ineffective when the bucket is in the carry position or obscured by the load.

Manufacturers and other specialist suppliers have been developing camera systems for some time to address the forward visibility problems with these vehicles. However, until these are proven and widely available, the only effective control measure currently is strict segregation of vehicles and pedestrians.

If you cannot ensure that segregation, you should not use larger capacity buckets on wheeled loaders; you should use alternative work methods, eg different machinery and/or site management arrangements.

## Action required

Regulation 4 of The Provision and Use of Work Equipment Regulations 1998 (PUWER) requires machinery to be suitable for the purpose it is used for. This also applies if the equipment is adapted, eg by fitting a larger bucket.

Before using wheeled loaders (or making changes to them), you should review your workplace transport risk assessments to ensure they will be safe to use in your environment and in the way that you intend to use them.

Consider the risks under the following headings.

### Safer site

- There should be rigorous segregation between pedestrians and vehicles. You should review the site layout, barriers, one-way systems, and other measures to ensure they give the best segregation of vehicles and pedestrians
- Remember, you will need to review this every time you make any changes to how you manage or process waste

### Safe vehicle

- Don't assume your wheeled loaders come supplied with the most appropriate or comprehensive mirrors etc for your specific needs (this is particularly important with second-hand machines). Critically assess the visibility and consider fitting additional mirrors, cameras etc if necessary.
- When fitting items of interchangeable equipment, such as larger capacity buckets, ensure the modified machine meets essential health and safety requirements (EHSRs) of the Supply of Machinery (Safety) Regulations. You should do this by consulting with the manufacturer of the interchangeable equipment or the base machine manufacturer.
- Where modifications reduce forward visibility, consider what additional aids can be fitted to help the driver and what additional risk controls can be implemented to protect pedestrians. (Some manufacturers have developed apps which flag the additional visibility aids required if larger capacity buckets are selected.)
- If you fit oversized buckets, you should be able to demonstrate that the risks are adequately controlled through your risk assessment. Daily checks of mirrors and other safety features are vital – if they are damaged or broken, the vehicle should not be used

### Safe driver

- Drivers should be trained and competent to drive the vehicles they will use –training should take account of any adaptations such as fitting oversized buckets or additional visibility aids
- Training should cover adjustments to seat, mirrors and other visibility aids. Other key safety messages such as the optimum travel or carry position of the bucket should be covered
- Also consider whether non-driving workers appreciate how limited the view from the cab is, eg sit them in the vehicle cab and identify the blind spots.

### Other considerations

- Monitor compliance with site rules – CCTV and supervisors have a key role here. If control measures (eg segregated areas or pedestrian routes) are not effective or enforced, take action to rectify this. Enforce the rules – you get the behaviour you walk past.

## Further information

- [Workplace transport safety - A guide to workplace transport safety \(HSG136\)](#)<sup>[1]</sup>
- [Workplace transport safety checklist \(PDF\)](#)<sup>[2]</sup>
- [Safe Transport at Waste and Recycling Sites WASTE 09 - Waste Industry Safety and Health Forum \(WISH\)](#)<sup>[3]</sup>
- [Provision and Use of Work Equipment Regulations 1998 \(PUWER\) - Work equipment and machinery](#)<sup>[4]</sup>
- [Hand Sorting of Recyclables \('Totting'\) With Vehicle Assistance WASTE 18 – Waste Industry Safety and Health Forum \(WISH\) \(PDF\)](#)<sup>[5]</sup>

## Link URLs in this page

1. Workplace transport safety - A guide to workplace transport safety (HSG136)  
<https://www.hse.gov.uk/pubns/books/hsg136.htm>
2. Workplace transport safety checklist  
<https://www.hse.gov.uk/workplacetransport/wtchk1.pdf>
3. Safe Transport at Waste and Recycling Sites WASTE 09 - Waste Industry Safety and Health Forum (WISH)  
[https://hsegov-my.sharepoint.com/personal/tim\\_small\\_hse\\_gov\\_uk/Documents/Safe%20Transport%20at%20Waste%20and%20Recycling%20Sites%20WASTE%2009%20-%20Waste%20Industry%20Safety%20and%20Health%20Forum%20\(WISH\)](https://hsegov-my.sharepoint.com/personal/tim_small_hse_gov_uk/Documents/Safe%20Transport%20at%20Waste%20and%20Recycling%20Sites%20WASTE%2009%20-%20Waste%20Industry%20Safety%20and%20Health%20Forum%20(WISH))
4. Provision and Use of Work Equipment Regulations 1998 (PUWER) - Work equipment and machinery  
<https://www.hse.gov.uk/work-equipment-machinery/puwer.htm>
5. Hand Sorting of Recyclables ('Totting') With Vehicle Assistance WASTE 18 – Waste Industry Safety and Health Forum (WISH)  
<https://www.wishforum.org.uk/wp-content/uploads/2019/06/WASTE-18-.pdf>

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