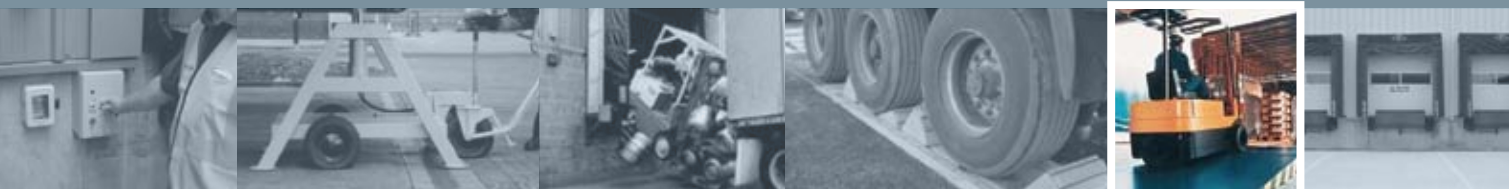


Loading dock safety guide



Edition 1 • August 2012



FREIGHT TRANSPORT ASSOCIATION

FTA Loading dock safety guide

Edition 1 • August 2012

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*Calls may be recorded for training purposes

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Introduction

This publication has been produced by the Freight Transport Association (FTA) Logistics Safety Working Group and the Institution of Occupational Safety and Health (IOSH) Retail and Distribution Group. It aims to identify the risks associated with vehicle/dock interface for the logistics sector and explore possible control measures.

Loading docks present a number of significant risks which require careful management. Differing specifications for docks and vehicles, visiting drivers and the lack of direct communication between drivers and warehouse staff all contribute to potential problems. This guide focuses on warehouse-type locations and should be read by anyone responsible for managing these sites. It aims to highlight risk areas and to consider possible solutions adopted by others in the sector.

We would like to thank the following for their help in producing this guide: The FTA Logistics Safety Working Group, the IOSH Retail and Distribution Group, Arla Foods, ASDA stores Ltd, Castell-Salvo, Coca Cola, Premier Foods, Sainsbury's, Tesco and Walkers Snack Foods.

The FTA Logistic Safety Working Group is made up of transport and safety professionals from a diverse range of sectors, including retail, third party logistics, parcels and couriers, waste and utilities. Its objective is to reduce the number of work-related deaths, injuries and ill-health in the logistics sector and key work includes:

- identifying, measuring and benchmarking logistics safety performance measures
- identifying issues
- sharing good practice

The group have actively fed into the Health and Safety Executive's (HSE) work, including the red tape challenge, review of fork lift truck guidance and proposals to introduce cost recovery for enforcement, as well as helping to shape the content and direction of the emerging HSE ports and logistics strategy.

Find out more at www.fta.co.uk

The IOSH Retail and Distribution Group has over 1,200 members working in retail, warehousing, road transport, distribution, catering as well as premise design and refit. This guidance document was developed from a work stream initiated by the Warehouse Safety Forum (WSF) formerly an HSE working party, which was transferred to IOSH and has been a sub-group of the IOSH Retail and Distribution Group since the publication of the HSE guide *Warehousing and storage: a guide to health and safety (HSG76)*, for which the WSF was created. The group brings together members facing the specific issues presented by this sector – from a workforce that typically includes language barriers, different skill levels, working hours and conditions, to the challenge of maintaining safety levels in a largely customer dominated environment. The group:

- stages interesting and informative networking events
- develops online webinars on current topics
- offers a communication channel for members wanting to take part in consultations on legislation and matters affecting the industry
- gives a focus for collaborative working with other industry safety forums and organisations

Find out more at www.iosh.co.uk/retailanddistributiongroup

Risks

According to the Health and Safety Executive (HSE), the transport and storage sector has a considerably higher rate of injury than the GB average and has the second highest rate of total injuries.

Risk assessment

The Management of Health and Safety at Work Regulations 1999 require every employer and self-employed person to make a suitable and sufficient assessment of the health and safety risks to employees and others to which their undertakings give rise. If five or more people are employed, the findings of the risk assessment must be in writing.

Not only are risk assessments legally required, they are also fundamental to help employers comply with other legal duties – such as ensuring as far as is reasonably practicable the health, safety and welfare of their employees at work as well as their duty of care to site visitors. They should be carried out by someone competent to do so.



The Health and Safety Executive (HSE) booklet *Five steps to risk assessment* can be downloaded at www.hse.gov.uk.

Often, especially in larger depots, goods-in and goods-out operations are quite different in terms of personnel and processes. For example, vehicles to be unloaded (goods-in) may well be driven onto the loading bay by a

visiting driver, who will also drive the vehicle off the bay when it has been unloaded. Visiting drivers may experience different safety controls at different depots and could become confused. The tractor unit of an articulated combination may remain coupled to the trailer whilst it is loaded. On the other hand, goods to be moved out of the site are often driven on and off bays by employed shunter drivers and trailers are loaded whilst uncoupled from a tractor unit. Where operations have significantly different characteristics, it may be better to risk assess these separately.

Key loading dock hazards

Clearly, there are many potential hazards at any workplace and these must be assessed. Also warehouses and workplace transport sites have particular hazards, such as manual handling, operation of fork lift trucks, reversing of vehicles and the need to segregate vehicles from pedestrians. However, there is already a wealth of existing guidance on these issues at www.hse.gov.uk and members of FTA can contact the Member Advice Centre on 0870 60 50 000 for advice. An area of common concern is

semi-trailer coupling and uncoupling procedures and the need to ensure trailer parking brakes are applied appropriately and existing guidance can be accessed via the HSE website. Also, at the time of writing, FTA is in the process of producing a specific guide on this subject. Visit www.fta.co.uk for more information.



This guide has chosen instead to concentrate on the particular hazards posed by the interface between the warehouse and the vehicle (the loading dock). These hazards are specific to loading docks and we are not aware of any existing industry guidance in this area. Most of them also create significant risks to those loading or unloading the vehicle and if not properly mitigated could result in major injuries or even death.

The following are the key loading dock hazards explored in this guide.

- Drive-away
- Vehicle creep
- Load roll-away
- Trailer tip
- Water ingress

Definitions

DRIVE-AWAY



A drive-away is when a vehicle or trailer is moved away from the loading bay too early, before the loading/unloading operation is complete. The vehicle loader, machinery or goods can fall from the vehicle, posing a danger to the loader or anyone working in the vicinity.

VEHICLE CREEP

Vehicles can move (or creep) away from the edge of the loading bay as loading equipment jolts the vehicle or compresses its suspension when moving between the bay platform and the vehicle. This can widen the gap between the

bay and the vehicle and cause the dock plate/leveller, which provides a platform between them, to suddenly slip. The vehicle loader, machinery or goods can fall from the vehicle, posing a danger to the loader and anyone working in the vicinity. This can occur even if the trailer has its park brake applied, due to the vehicle rocking on its suspension.



Dock creep can also occur if the trailer landing leg area of the yard is uneven or is deteriorating, causing the trailer foot to rock forward when loads are transferred into/out of the back of the trailer

This problem can also be exacerbated when:

- there is a difference between the height of the vehicle bed and the height of the loading dock
- differences in positioning and thickness between the buffers on the dock and those on the vehicle/trailer mean that the gap between the vehicle/trailer and dock can vary
- the vehicle/trailer is backed too close to the loading bay causing buffers to compress and the vehicle/trailer to be temporarily wedged in position. The 'bouncing' motion caused by the loading/unloading operation can then lead to a sudden drop in vehicle/trailer height
- freight containers are backed onto a dock and inadvertently sit on top of buffers (due to the significant height difference on a skeletal trailer). The container can then break away during loading/unloading, resulting in a sudden drop

LOAD ROLL-AWAY



The height of vehicle load platforms can vary significantly as can the height of loading docks. Individual vehicle's height can change according to whether it is empty or full and be affected by tyre pressure or suspension. With double-deck trailers, there can be a difference in height when loading the top or bottom deck. A steep incline, either on the dock plate or within the trailer,

can cause goods loaded on wheeled equipment (such as those in cages or dollies) to roll either into or out of the vehicle.

TRAILER TIP

When a trailer is uncoupled from the tractor unit and the landing legs lowered, the trailer can be prone to tipping forward from the landing legs if too much weight is placed towards the front of the trailer. This can be caused by a heavy load or the use of heavy equipment, such as a fork lift truck, within the trailer.

WATER INGRESS

Water entering the dock loading area can create a slip hazard for both pedestrians and those using mechanical equipment. Most loading bays have canopies, curtains or shelters to create a weather shield. However, this may be compromised by ill fitting seals or different vehicle and trailer designs, such as trailers designed to improve aerodynamics – known as 'teardrop' trailers. The sloping design means that water will naturally run backwards into the loading area.



Summary of key loading dock hazards

| Loading dock hazard | Who can be harmed and how |
|---------------------|---|
| Drive-away | Vehicle loader or others working on or near vehicle – falling from vehicle or dock or being hit by machinery or load falling from vehicle or dock |
| Vehicle creep | Vehicle loader or others working on or near vehicle – falling from vehicle or dock or being hit by machinery or load falling from vehicle or dock |
| Load roll-away | Vehicle loader or others working on or near vehicle – being struck by goods loaded on wheeled equipment rolling into or out of the vehicle |
| Trailer tip | Vehicle loader or others working on or near vehicle – falling from vehicle or dock or being hit by machinery or load falling from vehicle or dock |
| Water ingress | Warehouse staff – creates a slip hazard |

Control measures

Once hazards have been suitably assessed and significant risks identified, legislation requires control measures to be put in place to deal with them. This document identifies some common industry control measures for the key hazards identified in section one. Some control measures can help mitigate more than one hazard – for example the use of wheel chocks can mitigate both drive-aways and vehicle creep, and this is reflected within this chapter.

Control measures should never be considered a one-size-fits-all solution. Different control measures will suit different operations. Many organisations have a combination of the measures outlined in this chapter and most have adapted them to suit their own organisational needs and processes. Whatever measures are used, they will need to form part of a safe system of working that includes reasonably practicable controls. Organisations should document and effectively communicate their safe systems.

Drive-away control measures

Signals, signs and barriers

Signals, such as red/green traffic lights are commonly used at loading bays to indicate when it is safe (green) or not safe (red) to move a vehicle. They are generally positioned on the side of the dock door that the driver will be on, once the vehicle has been reversed onto the dock.



Indicator lights inside the warehouse at each loading bay are often used in conjunction with these to inform warehouse staff that the external traffic lights are set to red and that it is safe to open the loading bay doors. These systems generally require the driver to activate the light once the vehicle/trailer is positioned on the dock, which indicates to those in the warehouse that

it is safe to open the door to commence loading/unloading. This process is reversed when the vehicle/trailer is ready to be driven off the bay – the warehouse staff activate the mechanism that changes the warehouse indicator and turns the outside traffic light to green. When designing systems with lights, it should be remembered that glare from sunlight can significantly affect their visibility and so they should be positioned carefully and shaded to increase their effectiveness.

Other types of manual sign and barrier can also be used to show when a vehicle can be driven on and off a loading bay. For example, a steering wheel cover or a stop sign or barrier that is at the right height to be seen by the driver. These rely on robust procedures to ensure they are always used, and workers positioning such signs or barriers could be put at risk. For example, it may be necessary to control the movements of other vehicles in adjacent bays while signs are being put in place or removed.

Although these systems can be effective, most do not actually prevent a vehicle from moving away and so rely entirely on operatives following the signals and, of course, the signals working correctly. This can be more difficult to manage when dealing with visiting drivers, and especially those whose first language may not be English.

Key control

Key control systems are most commonly found in goods-in operations – where semi-trailers (which usually remain coupled to tractor unit) or rigid vehicles are unloaded at a depot.

Visiting drivers (whether employed by suppliers or subcontractors or other parts of the occupiers' organisation) are asked to hand over their ignition keys whilst the vehicle is being unloaded. These systems are often used in conjunction with other control measures, such as traffic light signals and can range from the relatively simple locked cupboard, to a more sophisticated system that is linked automatically to the loading bay doors. Automatic systems use electronic fobs placed within a panel, which unless activated when the vehicle's keys are attached, will not allow the particular bay door to be opened. Similarly, when the loading bay door is open, the fob cannot be removed from the panel. An example of a detailed safe system of work for this type of key control can be found in the Annex: Tools chapter at the end of this guide.

Other key control systems attach the vehicle keys to a hook on a wire on the back of the loading door. These wires pull the keys out of reach when the loading bay door is open.

Where possible, it is preferable for visiting drivers to be away from the vehicles whilst they are being loaded and only permitted back into them once it is safe to do so. Some



organisations only allow their own shunter drivers to back onto and off loading bays, asking visiting drivers to drop trailers or vehicles in designated parking areas. However, in these cases, visiting drivers should be provided with a safe waiting area, to ensure they are not put at risk as pedestrians on a busy site. Similarly, where drivers need to observe loading, they will need a safe place to do this.

Key control systems rely on drivers having only one set of keys (or handing in all sets they have on them), so safe systems of work should include asking the drivers if they carry any spares, and if so, handing these in too.

Trailer airline locking systems

Uncoupled semi-trailers present another opportunity to prevent drive-ways by preventing the trailer brake coupling (known as the suzie) from being attached to a tractor unit or shunter.



When the brake line is uncoupled, fail-safe brakes are applied to the trailer (note that these brakes should always be used in conjunction with applied trailer parking brakes to prevent the trailer moving). By locking the trailer brake coupling, the trailer cannot be coupled up to a motor vehicle and moved.

Cautionary note!

If a vehicle and trailer is equipped with an Electronic Braking System (EBS) it is possible under certain conditions that disconnecting the emergency (red) airline will NOT activate the fail-safe brakes on the trailer. It is therefore possible under certain conditions for a vehicle and trailer combination to be moved with the airline couplings disconnected which is extremely dangerous. All airlines and electrical suzies must be correctly connected before before moving a tractor and trailer combination.

There are various methods of achieving this, such as a padlock placed over the connection as well as purpose-built attachments.



The key to the airline lock is then controlled by being put in a safe position, which is usually connected with the loading bay door operation. For example, purpose-built systems use the airline-lock key to energise the loading bay door – it will not open without the key being in position.



Other systems have a tube connection built into the wall of the loading dock, so the padlock key can be attached to a hook on a wire that is lifted out of reach when the loading bay door is opened.



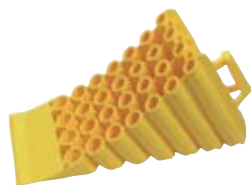
Loading bay door locking systems

Many of the control measures described in this section can operate in conjunction with an automated or manually-operated loading bay door system.

Doors are typically locked when signals are on red, ignition keys have not been handed over, or semi-trailer airlines are not locked.

Drive-away and vehicle creep control measures

Chocks and other restraints



A simple and cost-effective way to prevent a vehicle moving is to place large wedges of hard material, or chocks, against the wheels to prevent the vehicle moving.

Most wheel chock systems rely on the placing of individual chocks against the wheels of the vehicle or trailer. Chocks need to be suitable for the type of vehicle they are expected to restrain and can also be affected by the type of surface it is being used on, as well as the weather conditions.

A robust safe system of work covering the use of wheel chocks is important, as workers who put them in place and remove them can potentially be at risk if working where there are moving vehicles. It may be necessary to control the movements of other vehicles in adjacent bays while chocks are put in place or removed. Supervision and monitoring of their use can also be difficult. Because loading bays are often positioned closely together, it can be difficult to easily verify if chocks are in place. For this reason, they are often brightly coloured, and the use of mirrors or cameras can assist.

Automatic wheel chock systems are available that can be built into the dock approach at ground level. They can be operated automatically and thus remove the need for workers to manually place and remove chocks. They need to be used in conjunction with a robust system to ensure they are activated and de-activated at the appropriate time. Most automatic wheel chocks usually work in conjunction with dock traffic light systems.



Other restraint systems are also available, such as those which clamp on to a part of the vehicle, such as the rear under-run bar. These can be mechanically or hydraulically operated and also are often used in conjunction with traffic light systems.

However, without a system to ensure the vehicle is not moved when restrained, some vehicles simply rip less robust restraints out of their moorings or alternatively cause significant damage to the vehicle. Also these systems may not be suitable for all vehicle or trailer types – for example double-decked trailers.

Vehicle creep control measures

Dock plate markings

The plate that forms a bridge between the vehicle bed and the loading bay provides an overlap that should be able to allow for a certain amount of vehicle creep, without the plate falling and causing a risk of injury. The larger the overlap, the more vehicle movement can be incorporated.

Many organisations use a simple marking system to show the minimum amount of plate that must be within the vehicle and/or dock to allow for the maximum expected movement. This is commonly marked at around 150mm depth.



Buffer specification

Trailers/vehicles and docks may be fitted with buffers to protect them from damage on contact. The placement of these in terms of height from the ground and the distance between them can vary considerably and there are no standard industry placement points. This results in the in the trailer and dock buffers sometimes meeting and sometimes not, which can vary the potential gap between the vehicle and the loading bay. Standardisation of these placement points across an operation may help to reduce the problem of slipping dock plates. Standardisation may be more likely to be viable where the transport is carried out in-house or by a small number of providers and could be carried out through a planned programme of work over a period of time. There is an example of a standard survey that can help to identify existing placements in the tools section of this guide.

Buffers can be made of various material, but are generally either soft (compressible) or solid. If buffers are compressible and vehicles/trailers driven too close to the loading dock, the trailer/vehicle may be temporarily held into position because of the friction between the compressed buffers and the dock/trailer. The 'bouncing' motion caused by the loading operation can then lead to a sudden drop in vehicle trailer height. The use of solid

buffers may reduce this risk, but can also lessen protection from damage. Where soft buffers are used, drivers should be given clear instructions to ensure this issue is avoided.

Automatically adjusting buffers are available, although these can be expensive and require additional maintenance.



Dock approach maintenance

To maximise vehicle and trailer stability, the ground on the approach to the dock should be maintained so that it is even and any potholes created by landing leg wear or the weather should be quickly repaired. A regular site inspection should be carried out (this is included in the HSE site inspection checklist shown in the tools section of this publication), alongside an effective process of reporting problems as they occur.

Vehicle creep and load roll-away control measures

Dock and vehicle/trailer specification

Minimising the height difference between the loading bed of the vehicle/trailer and dock, where possible, will contribute to reducing the risk of vehicle creep and load roll-away.

Standardisation of these across an operation, however, may only be practicable where the transport is carried out in-house or by a small number of providers. It also may take a number of years to address, where existing locations and vehicles are already in use. A useful starting point may be to carry out a survey of your locations and your vehicles, as well as your main suppliers/visitors. An example survey (which includes requests for information on buffer heights) can be found in the annex tools section of this guide. This will also help to identify the most appropriate allocation of vehicle/trailer to loading bay, where

different height bays are available at the same location, or where it is possible to designate specified vehicles to appropriate sights.

Where new depots are being planned or new vehicles/trailer acquired, make sure that loading dock safety issues, and in particular loading bed/loading bay compatibility, are considered within the procurement process.

FTA's publication *Designing for deliveries* is a guide for planners and engineers to assist in designing service areas and access roads for commercial vehicles. Available as a book or CD CAD templates, it incorporates scaled drawings (1:500 or 1:200) and guidance on how to cater for all vehicles – small rigid, large rigid, artic and drawbar – to avoid extremes, but at the same time ensure layouts will work. Visit www.shopfta.co.uk for more information.



Dock levellers

Dock levellers bridge the gap between the vehicle/trailer and the loading bay and act as a ramp when there is a height difference between the two. They can take many forms and can adjust their gradient either mechanically or hydraulically.



According to HSE, it is better to have the bay platform slightly lower than the vehicle platform because someone inside a vehicle or trailer will have less ability to avoid a moving run-away load than those in the warehouse.

The greater the difference between the dock height and the vehicle/trailer load height, the more sophisticated the dock

levelling solution will need to be. Managing the allocation of vehicle/trailer to the most appropriate loading bay will help to mitigate this, where there are different height bays available.

The maximum gradient that a loaded truck can work on should also be considered. For each type of truck this depends on a number of factors, such as the type of power (electric, internal combustion etc), size of wheels, power output, wet or dry conditions etc. To this end the mechanical handling equipment manufacturers provide data sheets for each type of truck they produce showing grade ability.

Where the height difference is too great to be accommodated by a dock leveller, or the location restricts their use, other loading/unloading options include lifts, hoists cranes and conveyors.

Trailer tip control measures

Trailer stabilisation

One approach to control this hazard is to ensure the tractor unit remains coupled to the trailer whilst the vehicle is being loaded, thus avoiding the potential 'see saw' effect about the landing legs. However, in certain circumstances this may increase the drive-away risk.

Alternatively, trailer props can be used to stabilise the trailer. A robust safe system of work covering the use of trailer props is important, as workers who put them in place and remove them may be exposed to hazards from moving vehicles on site as well as the mechanical handling and safe positioning issues.



Lighter load handling equipment

Some organisations seek to avoid the use of heavy fork lift trucks on semi-trailers not only because this removes the need for additional stabilisation, but it also protects the trailer bed from potential damage. The use of lighter ride-on pallet trucks, hand pallet trucks, roll-cages or dollies could be considered instead, depending on the nature of the load.



Water ingress control measures

Canopy/shelter/seal specification

There are a number of types of canopy, seal or shelter available for docks that aim to protect the vehicle/trailer and dock interface from the weather and in particular from water ingress, which creates the slip hazard. Good dock canopy fit will also benefit the chill chain for fresh/frozen food suppliers by helping to keep the temperature maintained within the warehouse.

Generally, the more adjustable the canopy, the better the fit. However, adjustable systems generally require more maintenance and may be more prone to damage.

Consider the type of canopy most suitable for your operations, particularly where the loading bay/vehicle or trailer fit may have changed – for example with the increased use of teardrop or double-decked trailers.

Rain water grooves on trailers

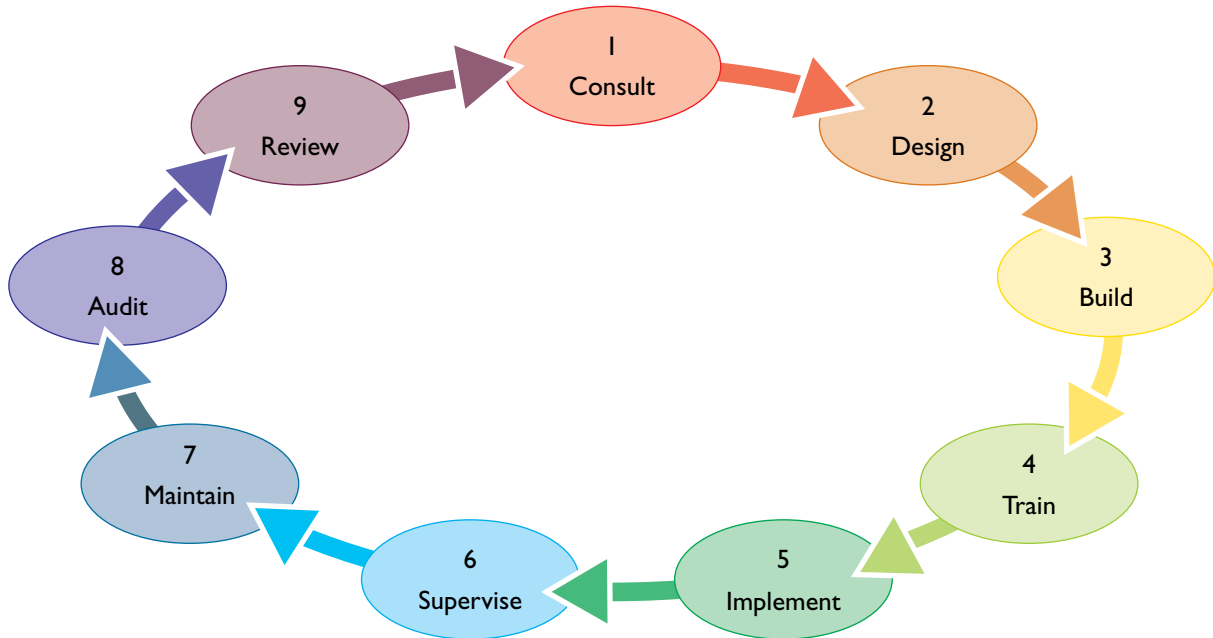
An additional measure is to ensure, where possible, trailers are fitted with rain water grooves to divert the water off sideways and not off the rear into the dock.

Summary of control measures and issues

| Hazard | Possible control measure | Possible issues |
|---------------------------------|--|--|
| Drive-away | Signals, signs and barriers | <ul style="list-style-type: none"> • Prone to human error • Lights can be difficult to see when affected by glare • Potentially places workers at risk when placing and removing signs and barriers |
| | Key control | <ul style="list-style-type: none"> • Driver may have access to spare set of keys • Not suited to unaccompanied semi-trailer loading/unloading |
| | Semi-trailer airline locking systems | <ul style="list-style-type: none"> • Not suited to rigid vehicle or accompanied semi-trailer loading/unloading |
| | Loading bay door locking systems | <ul style="list-style-type: none"> • Likely to be necessary to use in conjunction with other control measure |
| Drive-away and vehicle creep | Chocks and other restraints | <ul style="list-style-type: none"> • Manual systems potentially place workers at risk when fitting and removing • Manual systems prone to human error and difficult to monitor use • Some restraints systems can cause damage to device or vehicle • Some restraint systems do not cover all vehicle/trailer types |
| Vehicle creep | Dock plate markings | <ul style="list-style-type: none"> • Prone to human error |
| | Buffer specification | <ul style="list-style-type: none"> • May be difficult to standardise for existing stock or visiting vehicles/trailer • Automatically adjusting buffers are expensive to fit and maintain • Solid buffers expose trailer to additional damage |
| | Dock approach maintenance | <ul style="list-style-type: none"> • Requires regular checks together with a fault reporting process |
| Vehicle creep and load run-away | Dock and vehicle/trailer specification | <ul style="list-style-type: none"> • May be difficult to standardise for existing stock or visiting vehicles/trailer |
| | Dock levellers | <ul style="list-style-type: none"> • Can be expensive and there will be limitations on the height differences that can be accommodated |
| Trailer tip | Trailer stabilisation | <ul style="list-style-type: none"> • Leaving tractor unit attached may increase the drive-away risk • Trailer props potentially place workers at risk when placing and removing them |
| | Lighter load handling equipment | <ul style="list-style-type: none"> • Lighter load handling equipment may not be suitable for all load types |
| Water ingress | Canopy/shelter/seal specification | <ul style="list-style-type: none"> • Adjustable seals may require additional maintenance and may be more exposed to damage |
| | Rain water grooves on trailers | <ul style="list-style-type: none"> • Ability to specify may be limited |

Introducing and managing control measures

This section looks at the key steps that should be undertaken to implement and manage control systems, which are summarised in the process diagram below.



1 Consult

Once the risks have been formally assessed (see 'Risks' section on page 3 of this guide) it is important to consult with anyone affected by both the risks and the potential control measures. This includes loaders (usually the most at risk in the operation in terms of loading dock safety), drivers, supervisors, managers, IT teams, procurement teams and suppliers. This should help to ensure the system is not only practical but that it will be used. Make sure everyone understands why the organisation is addressing the issues and how important the success of the project is to them.

2 Design (and consult again)

Following full assessment and consultation, you should be ready to design your control measures and safe systems of work. Make sure you continue to consult throughout this process and get full sign-off from all parties before moving to the build stage. Remember to include safe systems for the unexpected, for example the last minute addition to a load or forgotten item that has to be added before the vehicle can depart – it is often these unplanned tasks that give rise to short cuts or deviation from an agreed and trained system of work.

3 Build

The build stage may take some time, so prioritise the locations or areas that pose the greatest risk. Make sure you have robust and agreed plans to mitigate any disruptions to the operations while this is taking place.

4 Train

Make sure adequate training is given to all who will need to change their way of working and that on-going instruction is available by way of posters, handbooks, procedure documents etc.

5 Implement

As with the build, implementation may need to be staged to minimise disruption.

6 Supervise

Safe systems of work should be supervised at all times, but particularly when a system is new. Any issues, including near misses, should be immediately escalated and investigated.

7 Maintain

Make sure you have identified a regular maintenance regime for equipment and machinery. Refresher training and training of new or visiting personnel should also be planned.

8 Audit

Regular audits carried out by someone who can do this without fear or favour to assess the ongoing compliance and suitability of the system.

9 Review

A formal review of the risk assessment and control measures in place should be planned within a set time of implementation. However, a review should also be carried out following any significant near-misses, incidents or unfavourable audit findings.

Annexes: Tools

1: Safe system of work example documents

Includes:

Reversing onto loading bays

Key control system

Shunting operations

Susie trailer lock operation

Loading

2: Dock, vehicle/trailer height and buffer position example survey





3: HSE site inspection – workplace transport checklist

Safe Working Practice

Reversing Vehicles onto Loading Bays











Why have this SWP? In 2010 most RTC's happened whilst reversing

| | |
|---------------|------------------------------|
| Tools and PPE | Hi-Viz, Safety Shoes, Gloves |
|---------------|------------------------------|

| | Key safe behaviour/safe conditions | Notes |
|----|---|---|
| 1 | Always use safety gloves | Protects hands while completing manual handling tasks, eg opening barn doors and uncoupling |
| 2 | Always use hazard lights while reversing in yard and move at slow speed | This is to warn other yard users that you are about to reverse and slow speed reduces impact to buffers and allows greater manoeuvrability |
| 3 | Check that the Green Light is on. Never use a bay if the lights are not working | Check there are no obstructions, pedestrians in the vicinity. DO NOT reverse onto the bay if there are manoeuvring vehicles either side of your allocated bay. Do not reverse onto a bay showing a red light |
| 4 | Pull forward into correct position for reversing |  |
| 5 | Open and secure barn doors, and remove number plate |  |
| 6 | Re-enter the cab | Always use three points of contact entering cab |
| 7 | When safe to do so, reverse onto loading bay with offside wheels of trailer running parallel with the guidelines. This will ensure that the rear of vehicle is squarely parked onto the bay. <ul style="list-style-type: none"> • Drivers must reverse all the way back • Shunters must stop before making contact with the bay and lower the trailer |  <p>Ensure clear visibility in every direction at all times, if unsure ask for assistance</p> |
| 8 | When vehicle is located on bay apply vehicle hand brake, select neutral and switch off engine | Remember to put the trailer park brake on |
| 9 | Proceed to uncouple the unit and trailer following relevant SWPs for the type of unit you are driving | |
| 10 | Move unit forward from beneath the uncoupled trailer | |
| 11 | Collect the Salvo from the loading bay storage box | |
| 12 | Fit the Salvo onto the trailer emergency air line coupling and remove the Castell key |  |
| 13 | Take the key and insert it into the Salvo light control unit and turn it, the traffic light will then turn to RED | Communication between trailers on loading bays and personnel in the warehouse via the dock door is strictly prohibited |

Safe System of Work

SALVO SYSTEM – SUSIE TRAILER LOCK

| | | | |
|--|--|---|--|
| <p>PERSONAL PROTECTIVE EQUIPMENT</p> <p>MANDATORY:  </p> <p>OPTIONAL: (SITE SPECIFIC)  </p> | | <p>SAFETY WARNINGS</p> <p>  </p> <p>  </p> | |
| <p>REFERENCES: RA-DIST-CENT-020A (M)</p> | | | |
| <p>Safety guidelines</p> <p>The designated PPE must be worn and Safety Warnings observed at all times where appropriate.</p> <p>Gloves will be made available if requested for this procedure.</p> <p>Before you begin and throughout the procedure, ensure that the area you are working in is clean and tidy.</p> <p>Vehicles must be parked in the designated areas specified at each site and must not obstruct any walkway.</p> <p>ALWAYS be aware of pedestrians who have Right Of Way. You must STOP for them.</p> <p>ENSURE that you adhere strictly to all Manual Handling techniques</p> <p>Before reversing, ensure that the allocated loading bay traffic light is GREEN and that the vehicles' hazard warning lights are on. If the loading bay door is open or opens, do not proceed. NEVER reverse onto or drive away from a loading bay showing a RED or NO light unless under the directive of Logistics or Warehouse management staff.</p> <p>When reversing, make sure it is safe to do so by using your mirrors and, if being assisted onto a loading bay, personnel must be in view at all times. If not, stop.</p> <p>The salvo lock weighs approx 1kg. Check and ensure that the equipment you are about to use is in good working condition, If not or a fault develops, inform a member of the Logistics or Warehouse management staff. During the course of normal use, it may become dirty, greasy and slippery.</p> <p>Do not un/attach the salvo system unless standing on the tractor unit platform. This ensures that the driver is protected from any moving vehicles and eliminates the requirement to unnecessarily use ladders etc to gain access to the trailer susie connectors.</p> <p>Drivers must follow site protocols in the event of restricted access to the warehouse and the operation of loading bay doors and dock levellers. These will be advised upon arrival at each site by the logistics office or designated yard marshal.</p> <p>Loading bay doors and dock leveller designs and operational controls vary from site to site. Do not operate unless appropriate training has been completed.</p> <p>Un/loading must not commence with the tractor unit attached to the trailer.</p> <p>All pre-departure checks including load integrity must be completed as directed in the driver's handbook.</p> <p>Under NO circumstances must the driver attempt to move a trailer off the loading bay with a salvo lock in situ.</p> | | | |

Sign-off to verify that briefing and practical demonstration has been given to and successfully completed by:

Trainer name (print): _____ Employee Name (print): _____

Trainer signature: _____ Employee signature: _____

Date: _____ Employee number: _____

Introduction

The Salvo loading dock safety device interlocks an articulated trailer to the loading bay ensuring 'Drive-Aways' cannot occur during loading and unloading. 'Drive-Aways' occur when vehicles prematurely move away from their designated loading bay, thereby creating a gap into which MHE can fall.

The Salvo trailer lock is a key operated mechanical locking device designed to fit onto the trailer male susie connector for the emergency brake line of all UK trailers. Its purpose is to prevent reconnection of the air brake hose, thereby immobilising the trailer when parked on a loading bay for loading or unloading. When fitted, the salvo can only be removed with a uniquely coded key. If the trailer is not locked in place, loading cannot begin. This system has now been installed at all Hovis sites.



Method

- 1 On arrival at a Hovis site, the driver will securely park his vehicle in the designated area, clear of any walkways and report to the logistics office. All local site protocols must be adhered to
- 2 The driver will be advised which loading bay to reverse the trailer onto and will be issued with a corresponding salvo lock and key. The salvo locks and keys are uniquely coded for each bay so they are not interchangeable
- 3 However, on arriving at a site, a driver may be directed to park or uncouple the trailer in a location other than a loading bay as directed by the logistics office or designated yard marshal
- 4 The salvo locks are kept in a dedicated enclosure box, typically located in the logistics office. It is the responsibility of the logistics office or designated yard marshal to issue and control the salvo locks
- 5 The driver will return to his vehicle and reverse onto the allocated loading bay ensuring that no un/coupling is taking place on the bays either side. If such activity is taking place the driver must wait until the tractor unit involved has driven away. Only reverse onto a bay with a Green light showing. If a Red light is illuminated, return to the logistics office for further guidance
- 6 Once successfully parked on the loading bay, climb up onto the rear platform and disconnect the trailer susie airlines and electric connectors (Figure 1). Removing the emergency brakeline applies the trailer brake and inhibits the movement of the trailer
- 7 Slide the salvo lock over the exposed red emergency brake line (Figure 2)



Figure 1



Figure 2

- 8 Rotate the key anticlockwise to lock in position (Figure 3)
- 9 Pull the key to remove it from the salvo lock (Figure 4), which is now firmly secured onto the coupling



Figure 3

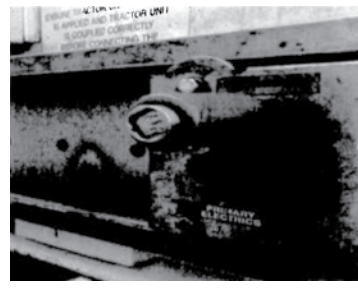


Figure 4

- 10 The tractor unit can only be uncoupled from the trailer once the salvo lock is attached and is then parked up in the designated area
- 11 The roles and responsibilities of, and the interaction between, drivers and warehouse staff are clarified by the respective site rules which accommodate varying loading bay layouts and operational requirements
- 12 On some sites, the driver is responsible for giving the salvo key to and advising the warehouse staff that the trailer has been parked on the loading bay and is ready for un/loading to commence
- 13 On other sites, it is the responsibility of the driver to operate the loading bay door and dock leveller in preparation for un/loading by warehouse staff or the driver him/herself

Powered loading bay doors

- 14 To operate the loading bay door and dock leveller controls, the salvo key must be inserted into the Salvo Control Panel (SCP) which is located adjacent to the loading bay control panel. Turn the key clockwise to secure into position. This will then illuminate the light on the SCP (Figure 5) and activate the door controls
- 15 Once the door is fully raised, the key is trapped in the SCP and cannot be removed
- 16 Follow the process for operating the loading bay and dock leveller, so that un/loading can commence
- 17 The driver will be advised when a load is ready to be removed from a loading bay via the logistics office or designated yard marshal
- 18 Once un/loading has been completed and the trailer is ready for removing from the loading bay, the salvo key needs to be released from the SCP. Retract the dock leveller and close the loading bay door
- 19 Prior to closing the loading bay door the driver must check the integrity of the rearmost loading bars to ensure that the load has been correctly secured. If a visual check for any non utilised loading bars and associated straps indicates that the load has not been adequately secured, please advise a FLM
- 20 Follow the process for removing the dock leveller from the trailer and closing the loading bay door. Depending on site protocols, this task will be executed by warehouse staff or drivers
- 21 Once the loading bay door has been fully closed, the salvo key is released by simultaneously pressing the illuminated button and turning the key anticlockwise (Figure 6). Rotate to the endstop, then remove the key from the SCP



Figure 5



Figure 6

Manual loading bay doors

- 22 For manually operated loading bay doors, a mechanical interlock is used to positively bolt the loading bay door in the closed position which disables the dock leveller controls. The unit incorporates a locking bolt which passes through the door running rail and into the 'Hercules' lock body (Figure 7)

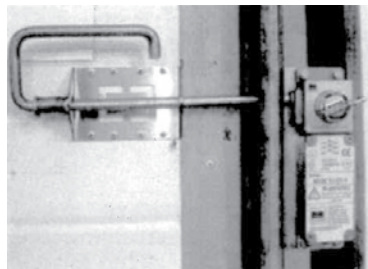


Figure 7

- 23 To operate, insert the key and rotate clockwise (Figure 8).

- 24 The locking bolt can now be rotated on its axis (Figure 9) and released (Figure 10)



Figure 8

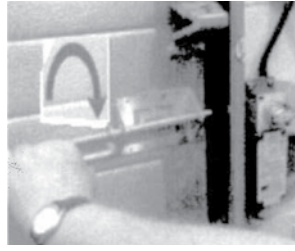


Figure 9



Figure 10

- 25 The turning of the key powers the dock levellers, changes the traffic lights and illuminates the trailer access light. The loading bay door can now be opened. With the door open, the key is retained in the lock. The dock leveller can now be operated as normal
- 26 Reverse the process to close the loading bay door and release the salvo key

Bollard and chain lock

- 27 The Salvo barrier system typically comprises of a pair of bollards, a chain and an interlock key and lock (Figure 11). This is used in installations when the dock leveller is separate from the loading bay door (Figure 12)

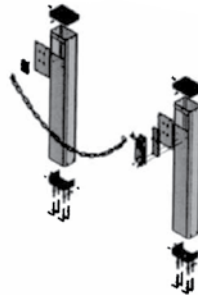


Figure 11

- 28 Un/loading cannot take place with the chain attached to both bollards. Internal loading bay traffic light will be Red
- 29 By inserting the salvo key into the lock body and turning the key anti-clockwise, the chain can be removed from the bollard (Figure 13). The chain is secured to the left hand bollard
- 30 The dock leveller can now be operated as normal in preparation for un/loading (Figure 14)
- 31 Upon completing of un/loading, reset the dock leveller and reattach the chain to the lock which will enable the salvo key to be released



Figure 12



Figure 13



Figure 14

- 32 The salvo key can be given to the driver, once released from its appropriate lock. The tractor unit can now be coupled to the trailer
- 33 Whilst standing on the tractor unit's rear platform, insert the key into the salvo lock, turn anticlockwise to enable the salvo lock to be removed from the trailers, emergency airline
- 34 Once the coupling process has been completed, the driver may remove the trailer from the loading bay, park up in the designated area
- 35 The driver must return to the logistics office, where the salvo lock and key will be exchanged for the appropriate paperwork for the load

Note: Drivers are not permitted to leave site without returning the salvo lock and key to the logistics office

- 36 For all sites which operate a shunter vehicle to manoeuvre trailers on or off loading bays, the exact same process shall apply in all instances

Safe System of Work

TASK: OPERATING THE COMBO DECK BAY 31 AND 32

This procedure is unique in that the two bays in question are design to operate Rigid and Trailers.

PPE Required:



Safety footwear



Hairnet



Gloves



Snoods to be worn where required



High Visibility Vest



Gloves optional

Logistics SSOW 000

Despatch SSOW 001

APPLYING THE SALVO SYSTEM TO RIGID

Beginning and end of the shift

The operative responsible for the rigid off loading operation will report to the Logistic office at the beginning of the shift each day.

He will sign for the collection of:

- A One key for each of the two perspex storage boxes mounted in the offloading deck area
- B The two salvo keys for operating bay 31 and 32

They must make their way to the basket deck and immediately unlock the compartment boxes, place the Salvo Key within each compartment and lock the compartment boxes. The box keys and the two salvo locks will be returned to the transport office at the end of each day when the rigid unloading operation has been completed.

The rigid offloading operation commences at approximately 7.00 daily and is completed by approximately 14.00
There are approximately 50 rigids to be unloaded daily during Monday to Saturday and 25 during Sunday.

Rigid

When the drivers return to the depot to commence the offloading of equipment (ie Baskets and store returns) they proceed to the offloading bays and reverse onto the bay always adhering to the Traffic Lights System. Before reversing the driver must straighten the trailer in line of the bay. Exit the trailer and lower the hydraulic tail left to prevent mechanism being caught up in the buffer flaps at point of contact of the bay. The rigid is then secured with the parking brake on and doors locked


Entering the warehouse

The rigid driver must wear the correct PPE and adhere to the pedestrian walkways from his rigid to the entrance to the warehouse. Inside the warehouse the drivers must be aware of MHE, pedestrian and basketeer movement within and around the operating area.

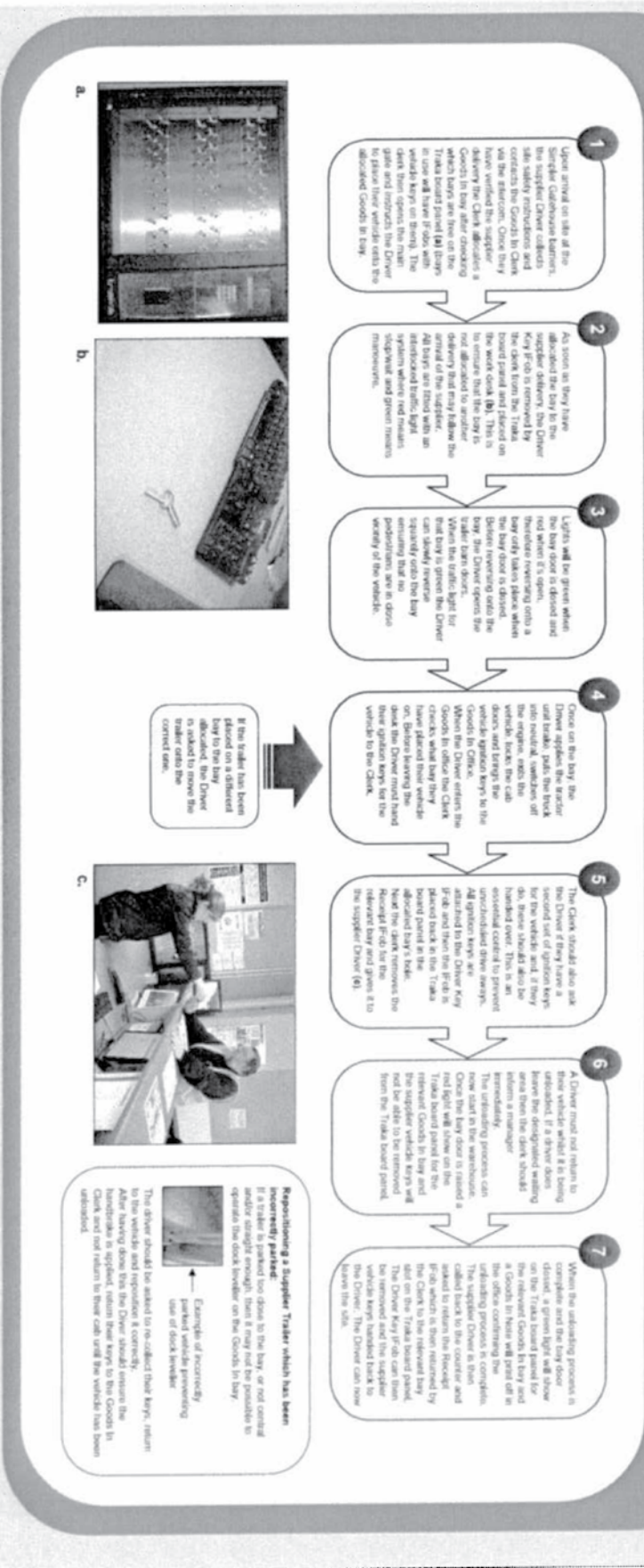
- 1 The driver will hand the Rigid Key to the operative responsible for managing the offloading operation
- 2 The operative will take the vehicle key, approach the appropriate compartment box for the bay on which the Rigid has parked, unlock the box, take out the Salvo key, place the Rigid Key on the hook in the box and lock the box.
- 3 The Salvo key will be used to unlock the bay doors
- 4 The Traffic lights on the bay will change simultaneously from GREEN to RED on the outside and ON to OFF on the inside
- 5 *(At no point should the Compartment Box be empty during this period. If the Salvo Key is present then there should be no vehicle operation on the bays. Should a Rigid key be present then vehicle operation is in progress)*
- 6 The operation of offloading the rigid will proceed by the operatives and assisted by the rigid driver

All Operatives working on the offloading operation will be trained and 'signed off' in the relevant SSOW

Area: Yard Activity: Supplier Reversing onto Bay (not 'Drop & Drive')

| | | | | |
|--|---------------------------------------|--|--|---|
| Activity Overview and Purpose Supplier Driver arriving at Depot (with Troka board panel system fitted) being allocated, and reversing onto, a Goods In bay | Produced by Simon Pritchard | Document ID SSSW-TK-CG-01-variant1 | Equipment Required • Troka board panel • Troka board proximity Fob and JFobs | Significant Hazards • Slips & Trips (carbing/wet/ice/fall) • Being struck, tripped or crushed by moving vehicles • Unchecked trailer departure from bay |
| | Date 05/04/11 | Review Date 05/04/16 | PPE Required  | |

Hazards are Controlled by Ensuring that:



Area: Yard

Activity: Shunting Operations

Activity Overview and Purpose
The coupling, reversing and uncoupling of trailers in the yard using a Shunt Vehicle and how Shunters interact with the Castell System.

Produced by
Simon Pritchard

Document ID
SCOW-TRUCK-2004-01


Date
2004/11

Review Date
2004/16

Equipment Required

- Shunt vehicle
- Two way radio
- Castell equipment

PPE Required



Significant Hazards

- Slips, trips & falls
- Collision with other MHE / Pedestrians / fixed object
- Trapping hazard

Hazards are Controlled by Ensuring that:

Coupling

1 Shunter checks that the yellow trailer MOC is visible. It is in trailer position. Any conditions should be reported to a Transport Team Manager.

2 Shunter connects all three air and electrical systems (2) and releases the trailer parking brake (3) and checks that the trailer is fully coupled to the tractor (4) and that no personnel are working on it. Shunter then checks that the trailer is fully coupled and that the trailer is fully coupled to the tractor (4) and that no personnel are working on it. Shunter then checks that the trailer is fully coupled to the tractor (4) and that no personnel are working on it.

Shunter Vehicle Check

- Diesel, oil & water levels
- workwear/water boots
- general cleanliness
- vehicle damage
- seatbelt, horns and signals
- lights
- fuel tank and no sign of damage
- Tyres have adequate tread
- Any defects are reported to a Transport Team Manager

When getting in and out of a shunter, use the handrail provided and hold on to the handrail. These are provided for the safety of the shunter. The handrails are provided for the safety of the shunter. The handrails are provided for the safety of the shunter.

When coupling to a 10 metre trailer, the shunter is moved into the 'straight-ahead' position i.e. parallel to the trailer. This ensures that the rear-shifter mechanism is in the correct position for coupling.

N.B. If the trailer vehicle has been hit at an angle, there can be a risk of the trailer being damaged. The shunter should be moved to the correct position for coupling.

With hand-to-hand coupling, Shunter is aware of reduced clearance around conditions, making use of trailer air suspension systems to reduce the trailer landing legs on roadblocks using the trailer rather than the back.

Reversing

Before reversing a trailer into a parking area or loading bay, Shunter reverses and is clear to ground clearance with double-deck trucks.

After reversing into the parking position (on the ground), Shunter applies tractor handbrake. Shunter lowers the trailer or dock splender in stand or using the manual handle. Shunter applies the trailer parking brake (3) and checks that the trailer is fully coupled to the tractor (4) and that no personnel are working on it. Shunter then checks that the trailer is fully coupled to the tractor (4) and that no personnel are working on it.

When reversing to park a 10 metre trailer, Shunter ensures that the trailer wheels are left in the 'straight-ahead' position i.e. parallel to the trailer. This ensures that the rear-shifter mechanism is in the correct position for subsequent coupling manoeuvres.

Uncoupling

After reversing into the parking position (on the ground), Shunter applies tractor handbrake. Shunter lowers the trailer or dock splender in stand or using the manual handle. Shunter applies the trailer parking brake (3) and checks that the trailer is fully coupled to the tractor (4) and that no personnel are working on it. Shunter then checks that the trailer is fully coupled to the tractor (4) and that no personnel are working on it.

Castell System

Articulated Vehicles

Once the trailer has been reversed onto a Goods Out Bay and the Shunt unit engaged, the shunter is used to move the trailer and the trailer is moved into the correct position for the trailer. The trailer is moved into the correct position for the trailer. The trailer is moved into the correct position for the trailer.

Rigid Vehicles

The process for rigid vehicles is different as they do not attach as part of an uncoupling process. For rigid vehicles, the trailer key is left in the trailer. The trailer key is left in the trailer. The trailer key is left in the trailer.

Castell Key Box (exterior)



Castell Key Box (interior)



Castell Salvo Unit



Salvo Unit attached to susle connector



Salvo Unit key inserted into Castell bay Control Panel



Castell System Photos

Area: Goods Out

Activity: Loading

Activity Overview and Purpose

Loading units of delivery onto trailers on a Goods Out Bay fitted with the Castell system.

Produced by
Simon Pritchard

Document ID
SSOM-T&C-03-03-revised

Date
18/07/11

Review Date
18/07/16

Equipment Required

- Loading MHE
- Shrink-wrap



PPE Required



Significant Hazards

- Slip, trips & falls
- Collision with other MHE / Pedestrians / fixed object
- Manual Handling injury
- Unscheduled trailer departure from bay

Hazards are Controlled by Ensuring that:

1. Loader obtains MHE from designated park area and performs and records safety checks on equipment to be used. Loader reports this to a nominated person. Loader breathes to Goods Out bay. Cause of bay. Loader removes and disposes of any MHE which is not to be used on the day and returns work area to state of any observations.

At the bay the Loader checks that the correct orange beacon has been placed on the top of the relevant bay colour panel to fit bay position.

The procedure that the Loader follows is on the bay, the tractor cab/unit has been unoccupied and is safe for the Loader then activities are carried out. The Loader then checks that the correct orange beacon has been placed on the top of the relevant bay colour panel to fit bay position.
2. No attempt should be made by the Loader to open the bay door if the orange beacon is not lit. Instead, the Loader should report this to a nominated person. Goods Out bay and not for further instructions.

For temperature controlled trailers: Each trailer compartment is set to a temperature of 1 to 4 degrees Celsius. Each trailer compartment is then left to the correct temperature once it is loaded with the correct product and the published has been put in place.

Also see associated SSOM: Lining Associated Doors

Using the trailer shelter slowly raises shelter using good manual handling technique. Loader operators close the shelter and ensure that the shelter is closed with sufficient overlap on the base of the trailer.
3. Before loading the Loader should perform a set of trailer checks. Tractors are clean, dry, underweight and clear of obstructions. Shrink-wrap and straps are in place and all lead restraint systems are checked every day. If any of the above are not correct, the Loader should report this to a nominated person. Tractors have a working Encrypt unit and cables in place.
4. Cages are loaded in rows of three, oddies and MUs in four. Single oddies and MUs should be loaded between two cages. Empty cages should be placed between the oddies or four oddies / MUs, but should not be used in the first row. When loading two cages adjacent, the two outer cages should be loaded first and the third placed between them. The oddies and MUs should be loaded last (being the rear trailer door) end of the trailer.

Cages/Oddies/MUs are then strapped securely in place every row, with one end of the strap attached to the fixed restraint strap and the other end attached to the side lock rail on the opposite side of the trailer, again ensuring a 90 degree angle.

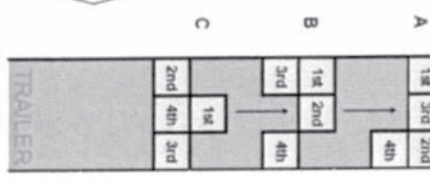
When loading using MHE, the Loader must ensure that the MHE is used in a safe manner and that the MHE is always within the safe working area of the MHE. The Loader must ensure that the MHE is always within the safe working area of the MHE. The Loader must ensure that the MHE is always within the safe working area of the MHE.
5. Loader should attempt to distribute weight evenly across the trailer. The reason that for example, there shouldn't be any cages loaded on the side of the trailer and all light cages down the other.

For temperature controlled trailers, brown product should be loaded first, followed by pink, then yellow. The cages should be loaded with the brown product and all light cages should be loaded last.

When loading a trailer with an unoccupied UDD, the Loader should ensure that the UDD is loaded with a minimum of 4 oddies at a time when using a 3 cage loading truck, position the trailer to collect further UDDs.

The last row of three cages should be loaded last. The Loader should ensure that the cages are loaded in a safe manner and that the MHE is always within the safe working area of the MHE.
6. **Loading using a Four Cage Loading Truck:** When using a four cage loading truck a bay is necessary to first manually reposition the last row UDD. Once the UDD is in the correct position the bay is moved into the middle of the bay. This is in order to safely manoeuvre the longer truck without having to travel too closely to the picking.

(See Diagram to Right) When the next four cages are loaded, two cages should be positioned to make up the first row (A). The next four cages are loaded to make up the second row (B). The remaining two cages will be positioned to either side for the next row (C).
7. Dock leveler is raised and ramp returned to secured position. The trailer shelter is closed, the shelter handle is placed in the locked position and the trailer sealed (locking the door). To seal the trailer the cables from the Encrypt unit (through the assigned holes of the handles) and the back of the trailer are connected to the cables back into the Encrypt unit and back in place. After connecting the cables the Loader should ensure that the cables are secured and that the bay door is closed.



Internal Bay Control Panel Orange Beacon

The strapping guidelines in the safe system of work are for trailers with the conventional horizontal slat strap system. For 'Step 2000' load restraint instructions, see associated SSOM: Strap 2000

2: Example survey for dock, vehicle/trailer and buffer position

Dock, vehicle/trailer and buffer position example survey



Background

We have developed this short questionnaire to evaluate the variations in dock, vehicle and buffer dimensions, as well as to identify some key issues in order to assess potential issues at depots and for those operating visiting vehicles. If you cannot get access to all the information listed, please submit the data you have as this will still be of use to us.

Dock and buffer information



2: Example survey for dock, vehicle/trailer and buffer position

Dock, vehicle/trailer and buffer position example survey

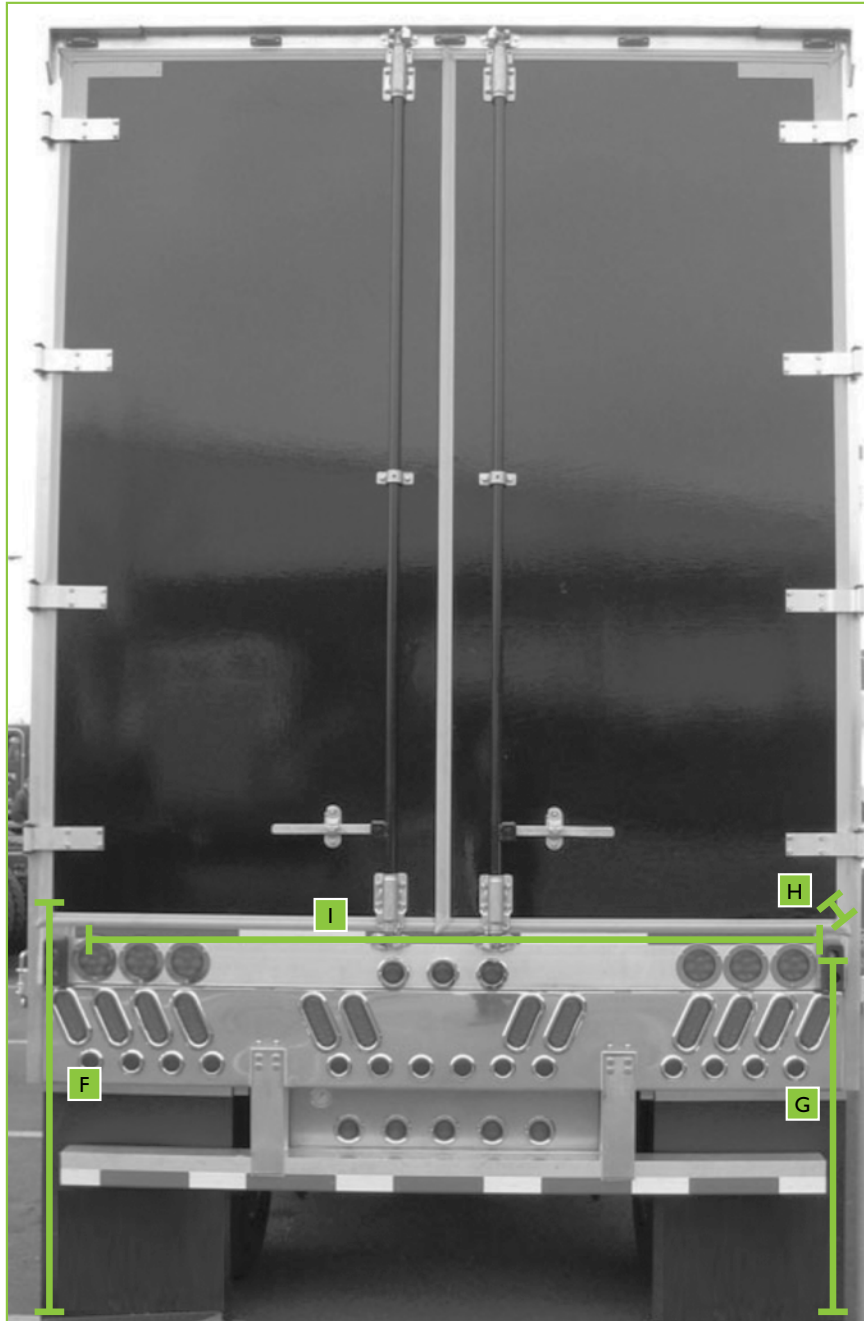
Please detail the dimensions of your loading docks using as many of the rows necessary to capture the various locations (depots) you may have. If you have more than 15, please add additional rows.

| | A | B | C | D | E |
|-------------|---|----------------------|---|---|--|
| Location | Dock height – from ground to floor of dock (cm) | Dock door width (cm) | Buffer height – ground to centre of buffer (cm) | Buffer depth – projection from dock face (cm) | Buffer width – between buffer centres (cm) |
| Location 1 | | | | | |
| Location 2 | | | | | |
| Location 3 | | | | | |
| Location 4 | | | | | |
| Location 5 | | | | | |
| Location 6 | | | | | |
| Location 7 | | | | | |
| Location 8 | | | | | |
| Location 9 | | | | | |
| Location 10 | | | | | |
| Location 11 | | | | | |
| Location 12 | | | | | |
| Location 13 | | | | | |
| Location 14 | | | | | |
| Location 15 | | | | | |

2: Example survey for dock, vehicle/trailer and buffer position

Dock, vehicle/trailer and buffer position example survey

Vehicle/trailer information



2: Example survey for dock, vehicle/trailer and buffer position

Dock, vehicle/trailer and buffer position example survey

Please indicate the vehicle or trailer bed heights of your own vehicles in the table below.

| | F | | | G | H | I |
|------------------------|--|---------------------------------------|--|--|----------------------------------|-------------------------------------|
| | Typical bed height (cm from ground) | Lowest bed height (cm from ground) | Highest bed height (cm from ground) | Typical vehicle buffer dimensions | | |
| | | | | Height – ground to centre of buffer (cm) | Projection – from sill edge (cm) | Width – between buffer centres (cm) |
| Refrigerated vehicle | | | | | | |
| Curtain sided vehicle | | | | | | |
| Box vehicle | | | | | | |
| Skeletal trailer | | | | | | |
| Double-decked trailer | | | | | | |
| Curtain sided trailer | | | | | | |
| Demountable body | | | | | | |
| Other (please specify) | | | | | | |
| Other (please specify) | | | | | | |

2: Example survey for dock, vehicle/trailer and buffer position

Dock, vehicle/trailer and buffer position example survey

Issues

Please use the table below to advise if any of the issues could affect your operations, or of any other issues you have identified, that are not listed. It would also be useful to know about any technical or management actions taken to resolve the issue.

| Issue | Affected? Y/N | Equipment/actions taken to resolve issue |
|---|---------------|--|
| Dock creep <i>Vehicle moves away from the dock</i> | | |
| Load run-away <i>Load runs into the vehicle or out into the dock</i> | | |
| Water leaks <i>Where this is caused by poor dock curtain fit</i> | | |
| Driver pull-away <i>Driver moves the vehicle before loading/unloading has completed</i> | | |
| Coupling/uncoupling <i>Trailer moves during coupling/uncoupling procedure</i> | | |
| Other <i>Please specify</i> | | |
| Other <i>Please specify</i> | | |
| Other <i>Please specify</i> | | |
| Other <i>Please specify</i> | | |

Your details

Name _____

Organisation name _____

E-mail address _____

Telephone number _____

THANK YOU FOR FILLING IN THIS SHEET



Health and Safety
Executive

Site Inspection - Workplace Transport Checklist

- The following checklist has been prepared as a guide to what employers should consider when trying to reduce the risk from vehicles in the workplace. It will not necessarily be comprehensive for all work situations.
- If the answer to a question is 'No', the references under the section heading indicate where further advice can be found.
- If the question is not relevant to your workplace leave the boxes blank.

1. Management and supervision of workplace transport risk (see References 1, 2, 3, 4, 5)

Check, in consultation with your employees, that your level of management control/supervision is adequate

| | Yes | No |
|---|--------------------------|--------------------------|
| Are site rules documented and distributed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are your supervisors, drivers and others, including contractors and visiting drivers, aware of the site rules? Are they aware of their responsibilities in terms of helping to maintain a safe workplace and environment? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has a risk assessment been completed for all workplace transport hazards? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the level of supervision sufficient to ensure that safe standards are maintained? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are sanctions applied when employees, contractors, etc fail to maintain these standards? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are adequate steps taken to detect unsafe behaviour of drivers of both site and visiting vehicles as well as pedestrians? Are the underlying reasons investigated to correct unsafe behaviours? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there good co-operation and liaison on health and safety matters between your staff and those who collect or deliver goods? | <input type="checkbox"/> | <input type="checkbox"/> |

Check what your drivers and other employees actually do when undertaking their work activities

| | Yes | No |
|--|--------------------------|--------------------------|
| Do drivers drive with care, eg use the correct routes, drive within the speed limit and follow any other site rules? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do your drivers and other employees have enough time to complete their work without rushing or working excessive hours? Do you monitor "job and finish" work to ensure drivers are not rushing to cut corners? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are your employees using safe work practices, eg when (un)coupling, (un)loading, securing loads, carrying out maintenance, etc? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do managers and supervisors routinely challenge and investigate unsafe behaviours they may come across? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do managers and supervisors set a good example, for instance by obeying vehicle / pedestrian segregation instructions, and by wearing high visibility garments where these are needed? | <input type="checkbox"/> | <input type="checkbox"/> |

WTCHK1 (05.08)

2. Site layout and internal traffic routes (see References 1, 2, 6, 7, 8, 9 10)

Check that the layout of routes is appropriate

| | Yes | No |
|---|--------------------------|--------------------------|
| Are the roads and footways suitable for the types and volumes of vehicular traffic and pedestrian traffic using them? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are vehicles and pedestrians kept safely apart? | <input type="checkbox"/> | <input type="checkbox"/> |
| Where necessary, are there suitable pedestrian crossing places on vehicle routes? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a safe pedestrian route that allows visiting drivers to report for instructions when entering the site? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there adequate numbers of suitable parking places for all vehicles and are they used? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a properly designed and signed one-way system used on vehicle routes within the workplace? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the level of lighting in each area sufficient for the pedestrian and vehicle activity? | <input type="checkbox"/> | <input type="checkbox"/> |

Check that vehicle traffic routes are suitable for the type and quantity of vehicles which use them

| | Yes | No |
|--|--------------------------|--------------------------|
| Are they wide enough? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do they have firm and even surfaces? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are they free from obstructions and other hazards? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are they well maintained? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do vehicle routes avoid sharp or blind bends? | <input type="checkbox"/> | <input type="checkbox"/> |

Check that suitable safety features are provided where appropriate

| | Yes | No |
|--|--------------------------|--------------------------|
| Are roadways marked where necessary, eg to indicate the right of way at road junctions? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are road signs, as used in the Highway Code, installed where necessary? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are features such as fixed mirrors (to provide greater vision at blind bends), road humps (to reduce vehicle speeds), or barriers (to keep vehicles and pedestrians apart) provided where necessary? | <input type="checkbox"/> | <input type="checkbox"/> |

3. Vehicle selection and suitability (see References 1 and 2)

Check that vehicles are safe and suitable for the work for which they are being used

| | Yes | No |
|--|--------------------------|--------------------------|
| Have suitable vehicles and attachments been selected for the tasks which are actually undertaken? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do vehicles have good direct visibility or devices for improving vision where reversing can't be eliminated and where significant risk still remains eg external and side mirrors; vision aids such as CCTV; sensing device? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are they provided with horns, lights, reflectors, reversing lights and other safety features as necessary? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do they have effective service and parking brakes? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do they have seats and seatbelts where necessary? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there guards to prevent access to dangerous parts of the vehicles, eg power take-offs, chain drives, exposed exhaust pipes? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do drivers have protection against bad weather conditions, or against an unpleasant working environment, ie the cold, dirt, dust, fumes and excessive noise and vibration? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a safe means of access to and from the cabs and other parts that need to be reached? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are surfaces, where people walk on vehicles, slip resistant? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is driver protection against injury in the event of an overturn, and measures in place to prevent the driver being hit by falling objects, provided where necessary? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are operators involved or consulted on vehicle selection? | <input type="checkbox"/> | <input type="checkbox"/> |

4. Vehicle maintenance (see References 1 and 2)

Check the level of vehicle maintenance is adequate

| | Yes | No |
|--|--------------------------|--------------------------|
| Is there a regular preventative maintenance programme for every vehicle, carried out at predetermined intervals of time or mileage (eg in accordance with manufacturers instructions)? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a system for reporting faults on the vehicle and associated equipment and carrying out remedial work? | <input type="checkbox"/> | <input type="checkbox"/> |
| Where vehicle attachments lift people or objects, are thorough examinations undertaken by a competent person (eg your insurance company)? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do the drivers carry out basic safety checks before using the vehicle? | <input type="checkbox"/> | <input type="checkbox"/> |

5. Vehicle movements (see References 1 and 2)

Check that the need for REVERSING is kept to a minimum, and where reversing is necessary that it is undertaken safely and in safe areas

| | Yes | No |
|--|--------------------------|--------------------------|
| Have drive-through, one-way systems been used, wherever possible to reduce the need for reversing? | <input type="checkbox"/> | <input type="checkbox"/> |
| Where reversing areas are needed are they marked to be clear to both drivers and pedestrians? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are non-essential personnel excluded from areas where reversing occurs? | <input type="checkbox"/> | <input type="checkbox"/> |
| If risk assessment shows site controls cannot be improved further and you need a banksman to direct reversing vehicles, are they adequately trained and visible? | <input type="checkbox"/> | <input type="checkbox"/> |

6. Un(Loading) Activities (see References 1, 2, 4, 11 and 12)

Check that there are safe systems for LOADING and UNLOADING operations

| | Yes | No |
|--|--------------------------|--------------------------|
| Are loading / unloading operations carried out in an area away from passing traffic, pedestrians and others not involved in the loading / unloading operation? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the load(s), the delivery vehicle(s) and the handling vehicle(s) compatible with each other? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are loading / unloading activities carried out on ground that is flat, firm and free from potholes? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are parking brakes always used on trailers and tractive units to prevent unwanted movement, eg when coupling vehicles? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the vehicles braked and/or stabilised, as appropriate, to prevent unsafe movements during loading and unloading operations? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are systems in place to prevent trucks driving away while they are still being (un)loaded? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are lorry drivers and others kept in a safe place away from the vehicle while (un)loading is carried out? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a safe area marked where drivers can observe loading (if necessary)? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the need for people to go on to the load area of the vehicle been eliminated where possible and if not is safe access provided and used? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is appropriate lifting equipment available for (un)loading vehicles? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is loading / unloading carried out so that, as far as possible, the load is spread evenly to avoid the vehicle or trailer becoming unstable? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are checks made to ensure the load is adequately secured in line with the Department for Transport Code of Practice and not loaded beyond their capacity before the vehicle leaves the site? | <input type="checkbox"/> | <input type="checkbox"/> |

7. Driver competence (see References 1, 2 and 13)

Check that your selection and training procedures ensure that your drivers and other employees are capable of performing their work activities safely and responsibly

| | Yes | No |
|--|--------------------------|--------------------------|
| Do drivers possess the necessary licences or certificates for the vehicles they are authorised to drive eg FLT's, shunt vehicles, site dumpers, etc? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you check the previous experience of your drivers and assess them to ensure they are competent? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you provide site specific training on how to perform the job, and information about particular hazards, speed limits, the appropriate parking and loading areas, etc? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you have a planned programme of refresher training for drivers and others to ensure their continued competence? | <input type="checkbox"/> | <input type="checkbox"/> |

See over the page for Section 8 (Un)sheeting and Section 9 Tipping

References

1. Workplace Transport Safety: Guidance for Employers. HSG 136, HSE Books, 2005, ISBN 0-7176-6154-7.
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3. Five Steps to Risk Assessment. Leaflet, INDG 163(rev 2), HSE Books, 2006.
4. HSE Information Sheet WPT06 Delivering Safely - free download at HSE Website.
5. Health and Safety in Road Haulage. Leaflet, INDG 379, HSE Books, 2003.
6. The Highway Code. Department of Transport, download at <http://www.direct.gov.uk/en/TravelAndTransport/Highwaycode/index.htm>
7. Designing for Deliveries Freight Transport Association 1998, ISBN 0 90299163 3 (£80 to members, £100 to non-members from FTA phone 01892 526171).
8. Lighting at Work. HSG 38, HSE Books, 1997.
9. Safety Signs and Signals - Guidance on the Regulations. L64, HSE Books, 1996.
10. The Traffic Signs Regulations and General Directions, 2002.
11. Code of Practice: Coupling or Uncoupling & Parking of Large Goods Vehicle Trailers, 2006. Institute of Road Transport Engineers (IRTE), Society of Operations Engineers (SOE), 22 Greencoat Place, London, SW1P 1PR. Telephone 020 7630 1111, website www.soe.org.uk.
12. Code of Practice - Safety of Loads on Vehicles (third edition) 2002, Department of Transport, ISBN 0 11552547 5 (<http://www.dft.gov.uk/pgr/roads/vehicles/vssafety/safetyofloadsonvehiclescodeo4566>)
13. Rider-operated Lift Trucks: Operator Training. L117, Approved Code of Practice, HSE Books.

3: HSE site inspection – workplace transport checklist

8. (Un)sheeting (see References 1, 2)

Check that sheeting and unsheeting operations are carried out safely

| | Yes | No |
|---|--------------------------|--------------------------|
| Do you use ground based sheeting methods? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are sheeting and unsheeting operations carried out in safe parts of the workplace, away from passing traffic and pedestrians and sheltered from strong winds and bad weather? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the vehicles parked on level ground with their parking brakes on and the ignition key removed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are gloves, safety boots, and, where necessary, eye and head protection provided, and used by those engaged in the sheeting / unsheeting operations? | <input type="checkbox"/> | <input type="checkbox"/> |
| Where manual sheeting is unavoidable, is there a system in place which avoids the need for a person on to climb on the vehicle or load, ie by providing a platform from which loads can be sheeted? | <input type="checkbox"/> | <input type="checkbox"/> |

9. Tipping (see References 1, 2)

Check that tipping operations are carried out safely

| | Yes | No |
|---|--------------------------|--------------------------|
| Do visiting drivers report to the site manager for any relevant instructions prior to commencing tipping operations? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are non-essential personnel excluded from tipping areas? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are tipping operations undertaken on ground that is level and stable, and a location free from overhead hazards such as power lines, pipework, etc? | <input type="checkbox"/> | <input type="checkbox"/> |
| Where sites are not level and stable, are the tipping faces safe for vehicles involved in tipping operations, eg compacted and no side slopes? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are suitably sized wheel-stops provided where vehicles need to reverse prior to tipping? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are drivers clear about when tailgates should be released or removed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do drivers check that their loads are evenly distributed across the vehicle prior to commencing tipping operations? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the drivers sufficiently experienced to anticipate loads sticking? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do drivers always ensure that the body is completely empty, and drive no more than a few metres forward to ensure the load is clear? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a system of maintenance in place for the tipper and the tipping mechanism? | <input type="checkbox"/> | <input type="checkbox"/> |