

## **Inspection intervention in the waste/recycling industry: reducing the risk of “struck by vehicle” accidents**

**SIM 3/2007/13**

**Target Audience:**

**HSE inspectors covering manufacturing and service industries**

<b>Date issued:</b> 2007-06-29	<b>OG Status:</b> Fully open
<b>Review date:</b> 2011-06-29	<b>Author Unit/Section:</b> Manufacturing Sector, Policy Group

Summary  
Background  
Action required  
Targeting  
Coordination of interventions: local authorities  
Coordination of interventions: large companies  
Operational efficiency (“bundling”)  
Sector support  
Resource required  
Recording  
Completion dates  
Inspector competency and training  
Health and safety  
Sector contacts  
Appendix 1 – Safe operation of refuse and recycling collection vehicles in a pedestrian environment  
Appendix 2 – Hand sorting of recyclables (totting) with vehicle assistance  
Appendix 3 – Initial enforcement expectation (collection activities and hand sorting with a mechanical loading shovel) and notice templates  
Appendix 4 – Inspection commentary

## **Summary**

This SIM alerts inspectors to the third phase of the intervention in the waste and recycling industry. It concentrates on gaining implementation of practices to reduce fatal and major injuries caused by vehicles striking waste/ recycling workers and members of the public.

## **Background**

Between July 2005 and October 2006 there were at least 16 people (workers & MoPs) struck and killed by vehicles in the industry. These included workers and MoPs struck by reversing collection vehicles engaged in street collection activities, workers struck by mechanical loading shovels and collection workers struck by other vehicles as they crossed the road.

Waste and recycling workers often work in close proximity to vehicles, either collecting, sorting or processing materials. This initiative is designed to gain implementation of a series of actions that have been devised by the industry to control that risk and is aimed at two distinct groups.

Firstly, both workers and members of the public are struck by reversing collection vehicles within the street environment. These accidents are reportable when the vehicle is engaged in collection activities as opposed to being in transit between activities (e.g. returning to the depot/ landfill).

The second significant cause of fatal accidents is the operation of mechanical shovels in conjunction with pedestrian workers. These accidents typically occur at waste/ recycling and sorting operations.

## **Action required**

Site visits to assess the management and operation of control measures to reduce the risk of vehicle/ pedestrian accidents in the following:

a) Safe operation of refuse and recycling collection vehicles in a pedestrian environment (210 inspections nationally)

- Local authority operated collection services
- Private sector operated collection services
- Community sector operated collection services

Inspections should seek to confirm that management of vehicle operations (in particular reversing) provides operators and members of the public with a level of safety equivalent to that set out in the waste industry safety health forum guidance note “waste and recycling vehicles in street collection.”

b) safe operation of mechanical shovels in association with pedestrian pickers / totters (80 inspections nationally)

- Materials recycling facilities
- Material reclamation (metal/ wood/ construction waste)
- Composting facilities
- Civic amenity sites/ household recycling centres

Initial guidance has been provided to the industry on the HSE website on this issue. More detailed guidance will be linked to this reference.

It is recommended that inspection follows the protocol set out in appendix 1 and 2. Initial enforcement expectations and model enforcement notices are given in appendix 3 and a commentary on the standards is given in appendix 4.

## **Targeting**

This SIM does not dictate which local authorities and other organisations should be visited. Local knowledge should be used to identify the most appropriate sites to visit. The manufacturing sector can provide details of some waste management facilities in each area.

## **Coordination of interventions: local authorities**

Where facilities and services are provided by local authorities it is essential that any intervention is discussed and co-ordinated with the FOD Account Manager/ Single Point of contact for each authority. Local authorities should then be made aware of the scope and potential breadth of HSE’s intervention covering this and other programmes.

## **Coordination of interventions: large companies**

FOD in partnership with the Manufacturing Sector has developed central interventions with several of the large national waste management companies. FOILE and LOPP databases should be consulted to identify any companies with which there is a central approach. Existing companies are Veolia, Sita, Biffa and Accord.

## **Operational efficiency (“bundling”)**

There is the potential to coordinate and deliver (“bundle”) this work with other initiatives such as:

- Public Sector Programme (PSP1): Linking visits to the Environmental Services Directorate and Human Resource Management Departments of local authorities could provide opportunities to sample/ audit the health and safety management capability of the local authority overall. In particular the visits could:-
  - Press the business case for managing sickness absence (MSA) in the public sector, assessing the organisation’s policies and practice to MSA and
  - Assess the management of the other main causes of work related injuries and ill health (MSD, Violence, and Slips).
- Moving goods safely (Fit3): Visits to waste/ recycling facilities such as transfer stations, recycling facilities and materials reclamation operations may provide opportunities to make contact with haulage companies targeted in MGS3 (inspectors should liaise with MGS3 coordinators).
- Safe interventions (Fit3): Visits to some waste management facilities may also incorporate equipment covered in the safe interventions initiative, i.e. balers, shredders and crushers (inspectors should liaise with divisional champions).
- Backs Campaign (Fit3): Visits to some waste/ recycling operations may also be suitable for Backs Campaign contacts, in particular those that give the opportunity to sample rehabilitation schemes.

## **Sector support**

The Sector would welcome the opportunity to address groups of key personnel such as elected members, waste/ recycling strategists and contract managers, from clusters of local authorities and organisations. Inspectors should liaise with the Account Managers/ Single Point of Contact to ensure that such an approach is consistent with the overall strategy for that LA.

The Manufacturing Sector will be supporting the inspection initiative with a series of seminars and media articles to promote the standards.

## **Resource required**

Visits should be carried out by B3/4 inspectors and will normally take less than 0.5 days per contact.

Resource has been allocated in proportion to the number of local authorities in each FOD division: W&W=21 days; E&SE= 46 days; London=12 days; Midlands=28 days; Y&NE= 16days; NW=15days & Scotland=7days.

## **Recording**

The inspection proforma(s) at Appendix 1 and 2 should be completed and returned to the Manufacturing Sector (Baljit Sahota, Leeds Office). Contacts should be recorded on coin as normal, no keywords are required.

Examples of action plans, enforcement notices, best practice and other noteworthy information should be forwarded to the Manufacturing Sector for use to support and promote the initiative.

## **Completion dates**

Visits can be made at any time between April 2007 and March 2008.

## **Inspector competency and training**

An inspection protocol, initial enforcement expectation and commentary are provided as Appendices to this SIM. These provide all information necessary to deliver this initiative.

The Manufacturing Sector has provided briefings and joint visits to groups of inspectors when necessary. These are still available when there is a sufficient need.

## **Health and safety**

Inspection of waste/ recycling collection and disposal activities has the potential to expose HSE staff to risks to their safety.

Inspectors should ensure that vehicle drivers and site operators are aware of their presence and where practicable their positioning should be agreed with operators. Inspectors must at all times wear high visibility clothing. When observing totting, hopper loading and vehicle movements you must ensure that you are in a safe position, outside the vehicle operation area, that the driver is aware of your presence at all times and you do not place yourself in blindspots or other areas in which the vehicle may collide with you.

Ensure that you can see the driver at all times (then the driver can see you).

## **Sector contacts**

For further information please contact; Trevor Hay, Manufacturing Sector, Government Buildings, Ty Glas, Cardiff, CF14 5SH: VPN 511 3077, tel 02920 263077 or [trevor.hay@hse.gsi.gov.uk](mailto:trevor.hay@hse.gsi.gov.uk)

## Appendix 1 - Safe operation of refuse and recycling collection vehicles in a pedestrian environment

**Reference:** "Waste and recycling vehicles in street collection"

**Inspector Name:**

**Date of visit:**

**Company/organisation visited:**

**Address:**

**Site activity, (e.g. collection of wheelie bins/garden waste/boxes etc)**

<b>Assessment Scale</b>			
Each risk control indicator should be assessed against the following 1-4 scale. A score of 1 must satisfy all the appropriate criteria of the risk control indicator.			
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Full compliance in areas that matter	Broad compliance in areas that matter	Some compliance in areas that matter	Limited or no compliance in areas that matter

<b>Safe operation of waste/recycling collection vehicles</b>									
					<b>NA</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Responsibility</b>									
	Named directors or sufficiently senior managers are nominated to ensure effective implementation of safe vehicle operation policies								
	Nominated directors/ senior managers monitor and review the effectiveness of the policy								
<b>Organisation</b>									
	Driver assessment procedures (incl pre-employment checks of licence, ongoing driving licence checks, medical assessment and competence assessment)								
	Adequate arrangements to ensure agency drivers (where used) are competent.								

Safe operation of waste/recycling collection vehicles						
		NA	1	2	3	4
<b>Hardware</b>						
	Driver carries out daily checks of CCTV, audible reversing warning and reversing aids					
	CCTV provided for waste/ recycling collection vehicles operating with pedestrian loaders (and all RCV's).					
	CCTV provides a good view of the working zone (recommended at least 5m behind the vehicle)					
<b>Route risk assessment</b>						
	Suitable and sufficient risk assessment carried out					
<b>Safe systems (i.e. based upon risk assessment)</b>						
	Routes planned and timed to avoid identified areas of high risk such as schools, peak traffic periods, pedestrian zones etc.					
	Routes planned to eliminate or reduce the need for reversing					
	Routes planned to operate "single side of street" collection where appropriate.					
	Reversing assistants used where reversing aids alone will not adequately control the risk to pedestrians (see paras 81-83)					
<b>Safe reversing</b>						
	Reversing assistants trained and nominated					
	Reversing assistants fully understand the extent of their role					
	Drivers fully understand their role and the role of the reversing assistants.					
	Reversing assistants wear high visibility clothing					
	Competent reversing using reversing assistants appropriately					
<b>Monitoring</b>						
	Evidence of regular monitoring to ensure that safe systems of work are effective and used.					

Action taken (advice/ letter/ enforcement):

Comments:

Return to Baljit Sahota, Leeds Office, VPN 515 4349

## Appendix 2 - Hand sorting of recyclables (totting) with vehicle assistance

**Reference:** “Hand sorting of recyclables (“Totting”) with vehicle assistance. Link to follow.

**Inspector Name:**

**Date of visit:**

**Company/ organisation visited:**

**Address:**

**Site activity, (e.g. demolition waste/ municipal waste etc)**

<b>Assessment Scale</b>			
Each risk control indicator should be assessed against the following 1-4 scale. A score of 1 must satisfy all the appropriate criteria of the risk control indicator.			
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Full compliance in areas that matter	Broad compliance in areas that matter	Some compliance in areas that matter	Limited or no compliance in areas that matter

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>NA</b>
<b>Safe Site</b>					
Mechanical sorting is used so far as is reasonably practicable to eliminate the need for hand picking in association with vehicles?					
Sorting areas are well lit?					
Non essential personnel excluded from area in which mechanical shovel operates?					
Non essential vehicles excluded from area in which mechanical shovel and pickers operate?					
Effective segregation of pedestrians and tipping vehicles.					
Safe/ segregated/ protected zones established for totters to withdraw to before mechanical shovel approaches stockpile.					
<b>Safe Vehicle/ driver</b>					
Effective vision to the sides, front and rear of the vehicle visibility provided?					
Effective vision to the sides, front and rear of the vehicle maintained (i.e. mirrors and other aides in working order)?					

	1	2	3	4	NA
Driver able to see that totters are in a safe position before approaching stockpile?					
Driver adequately trained and competent to operate vehicle safely					
Driver has clear understanding of the safe system of work?					
Clear communication between totters and driver?					
<b>Safe System of Work</b>					
Operation of a safe system of work during hand picking and vehicle "turning" of the stockpile.?					
Totters (including casual staff) have a clear understanding of the safe system of work?					
Totters wear high visibility clothing at all times?					

Action taken (advice/ letter/ enforcement)

Comments:

Return to Baljit Sahota, Leeds Office, VPN 515 4349

## Appendix 3 – Initial enforcement expectation (collection activities and hand sorting with a mechanical loading shovel) and notice templates

Initial Enforcement Expectation (collection activities)

Initial Enforcement Expectation (Hand sorting with a mechanical loading shovel)

Notice templates

Notice 1: Collection vehicles, adequate field of vision

Notice 2: Collection vehicles, assessment of collection routes

Notice 3: Collection vehicles, reversing assistants

Notice 4: Sorting operations, segregation of mechanical shovels and pedestrians

Notice 5: Sorting operations, adequate field of vision for drivers of mechanical shovels

### Initial Enforcement Expectation (collection activities)

Activity	Issue	Benchmark	Risk Gap	IEE
Reversing of LGV collection vehicles in association with pedestrian workers and/ or in uncontrolled pedestrian areas	The driver does not have effective vision to the sides, front and rear of the vehicle (i.e. mirrors, CCTV) to prevent impact with pedestrian workers at the rear of the vehicle and members of the public who may enter the reversing zone.	Serious personal injury/ nil-negligible	Extreme	IN (notice 1)
LGV collection vehicles operating in association with pedestrian workers and/ or in areas where members of the public may be exposed to a risk of being struck by the vehicle e.g. residential, service, retail, educational and healthcare environments.	Risk assessment has not been carried out to identify reasonably practicable control measures to reduce the risk of vehicle/ pedestrian collision on each collection round	Serious personal injury/ remote	Moderate	IN (notice 2)
Reversing operations (with crewed vehicles) in areas where it is foreseeable that pedestrians may enter the reversing zone.	Reversing assistants are necessary to warn members of the public and signal collection vehicle drivers to stop if the pedestrians are likely to enter the reversing zone.	Serious personal injury/ nil-negligible	Extreme	IN (notice 3)

## Initial Enforcement Expectation (hand sorting with a mechanical loading shovel)

Activity	Issue	Benchmark	Risk Gap	IEE
Mechanical loading shovels used to sort waste/ recyclables.	Non essential personnel have access to the vehicle operating area during vehicle operations.	Serious personal injury/ nil-negligible	Extreme	IN (notice 4)
Mechanical loading shovels used to sort waste/ recyclables with pedestrian workers picking (totting) out fractions from the stockpile.	Loading shovels operating in close proximity to pedestrian workers without adequate controls in place to ensure effective segregation.	Serious personal injury/ nil-negligible	Extreme	IN (notice 4)
Mechanical loading shovels operating in areas which it is foreseeable they may share with pedestrians.	Effective all round vision is not provided, e.g. mirrors, clear windscreen and CCTV coverage of blind spots.	Serious personal injury/ nil-negligible	Extreme	IN (notice 5)

N.B. The Inspection Pack for Workplace Transport provides a range of IEE and model enforcement notices for general transport issues including training, management of operations, maintenance and lighting.

### Notice templates

This section contains outlines for notices. These are only suggestions and you may wish to alter them depending on local circumstances.

You should also consult guidance on notices given in relevant Inspection Packs.

- 1 Notice 1: Collection vehicles, adequate field of vision.
- 2 Notice 2: Collection vehicles, assessment of collection routes.
- 3 Notice 3: Collection vehicles, reversing assistants.
- 4 Notice 4: Sorting operations, segregation of mechanical shovels and pedestrians.
- 5 Notice 5: Sorting operations, adequate field of vision of mechanical shovels.

#### Notice 1: Collection vehicles, adequate field of vision

....you are contravening ...the following statutory provisions:

The Health and Safety at Work etc Act 1974 sections 2(1) and/or 3(1) and/ or The Provision and Use of Work Equipment Regulations 1998, regulation 28(e).

...the reasons for my said opinion are:

when reversing the collection vehicle the drivers direct field of vision is inadequate to ensure the safety of pedestrians (collection workers and members of the public).

Schedule:

To comply with this Notice you should:

1 Equip the vehicle with rear facing closed circuit television camera and monitor to provide the driver with a clear view of the rear working and pedestrian zone immediately behind the vehicle.

Or

2 Any other equally effective means of complying with the Notice may be used.

N.B. The guidance note produced by the Health and Safety Executive and the Waste Industry Safety and Health Forum (WISH) "Waste and recycling vehicles in street collection" gives guidance on how this Notice may be complied with.

## **Notice 2: Collection vehicles, assessment of collection routes**

....you are contravening ...the following statutory provisions:

The Health and Safety at Work etc Act 1974 sections 2(1) and/or 3(1), and The Management of Health and Safety at Work Regulations 1999, regulation 3(1).

...the reasons for my said opinion are:

a suitable and sufficient assessment of the risk of pedestrians (both workers and members of the public) being struck by vehicles during the collection of waste and recyclables has not been carried out.

Schedule:

To comply with this Notice:

1 You should carry out a suitable and sufficient assessment of the risk of collection vehicles colliding with pedestrians (employees and others) when the vehicle is engaged in collection activities. The assessment should review the design and organisation of collection rounds and consider factors such as;

- a Street layout
- b Reversing
- c Pedestrian activity (including around high risk sites such as schools, residential care homes, pedestrian zones etc)
- d Vehicle activity (including congestion and road speeds)
- e Weather and environment factors such as bright sunlight/ night working
- f The collection vehicle

- g Management arrangements
- h Frequency of collection

Special consideration may be needed for people with disabilities, young people.

2 The findings of the assessment should be used to ensure that the collection rounds are designed and operated to reduce the risks of collection vehicles causing injury to pedestrians so far as is reasonably practicable.

OR

3 Any other equally effective means of complying with the Notice may be used.

N.B. The guidance note produced by the Health and Safety Executive and the Waste Industry Safety and Health Forum (WISH) "Waste and recycling vehicles in street collection" gives guidance on how this Notice may be complied with.

### **Notice 3: Collection vehicles, reversing assistants**

....you are contravening ...the following statutory provisions:

The Health and Safety at Work etc Act 1974 sections 2(1), 2(2) and/or 3(1) and The Management of Health and Safety at Work Regulations 1999, regulation 5(1).

...the reasons for my said opinion are:

where reversing of collection vehicles cannot be avoided in areas where it is foreseeable that pedestrians may enter the reversing zone the reversing operation is not organised to prevent, so far as is reasonably practicable, the risk of injury to those pedestrians.

Schedule:

To comply with this Notice:

1 Implement a system of work where trained "reversing assistants" are used to:

- a Signal to the collection vehicle driver to stop when necessary to prevent the vehicle colliding with pedestrians and
- b Warn approaching vehicles and pedestrians of the danger of the reversing collection vehicle to help prevent them entering the reversing zone.

OR

2 Any other equally effective means of complying with the Notice may be used.

N.B. The guidance note produced by the Health and Safety Executive and the Waste Industry Safety and Health Forum (WISH) "Waste and recycling vehicles in street collection" gives guidance on how this Notice may be complied with.

#### **Notice 4: Sorting operations, segregation of mechanical shovels and pedestrians**

....you are contravening ...the following statutory provisions:

The Health and Safety at Work etc Act 1974 sections 2(1) and/or 3(1), The Management of Health and Safety at Work Regulations 1999, regulation 5(1) and the Workplace (Health, Safety and Welfare) Regulations 1992, regulation 4(1).

...the reasons for my said opinion are:

that you as an employer, subject to a duty by virtue of Regulation 4(1) of the Workplace (Health, safety and welfare) Regulations 1992 (as amended) have failed to comply with the provision of Regulation 17(1) of the said regulations in that adequate arrangements are not in place to allow pedestrians and vehicles to circulate in a safe manner and to effectively segregate moving vehicles and pedestrians during the process of sorting (totting) materials.

Schedule:

To comply with this Notice:

1 You should provide a system in the picking area which, so far as reasonably practicable:-

- a prevents the operation of mechanical shovels and other vehicles in areas where sorting of materials by pedestrian workers is taking place and
- b prevents pedestrian access to areas where mechanical shovels and other vehicles are in operation. So far as is reasonably practicable segregation should be provided by physical means such as barriers or protected zones (refuge) or are safe by distance.

2 So far as is reasonably practicable, separate traffic routes to and from the picking area should be provided for pedestrians and vehicles. Where separate routes are not reasonably practicable, and vehicles and pedestrians use the same route, it should be wide enough to enable any vehicle likely to use it to pass pedestrians safely (for any routes in existence before 1 January 1993 where it is not practicable to make the route wide enough, passing places or traffic management systems should be provided as necessary).

3 Where pedestrian and vehicle routes have to cross, appropriate crossing places should be provided. Where necessary, barriers or rails should be provided to prevent pedestrians crossing at any particularly dangerous points, and to guide them to designated crossing points. At designated crossing places there should be adequate visibility for pedestrians and vehicle drivers.

4 You should draw up and implement a system for informing and instructing employees and other people who come onto the site, including visitors (both pedestrians and people in vehicles) about the site rules concerning pedestrian/ vehicle separation.

5 You should set up a system for checking compliance with your site rules for operating vehicles within the picking area and pedestrian/ vehicle separation. The system should include reference to:

- a Which named individual(s) is/are responsible for monitoring compliance.
- b How (including how often) they should monitor compliance.
- c What they should do if non-compliance is found (including investigating any reasons for non-compliance; any need for further precautions including further information, instruction, training and supervision, reference to any disciplinary procedures).
- d What records should be kept of non compliance.

OR

6 Any other equally effective means of complying with the Notice may be used.

**Notice 5: Sorting operations, adequate field of vision for drivers of mechanical shovels**

....you are contravening ...the following statutory provisions:

The Health and Safety at Work etc Act 1974 sections 2(1) and/or 3(1) and The Provision and Use of Work Equipment Regulations 1998, regulation 28(e).

...the reasons for my said opinion are:

the direct field of vision for the driver of the loading shovel is inadequate to ensure the safety of pedestrians.

No schedule to be included. Make reference in accompanying letter to the need to carry out risk assessment to identify the appropriate devices needed to provide the driver with means to improve his vision so far as is reasonably practicable. A loading shovel drivers direct field of vision is often inadequate both moving forward and reversing. Vision aids may include external front, side and rear mirrors, closed circuit television (CCTV) and sensing devices.

## **Appendix 4 – Inspection commentary**

This initiative seeks to target two areas where there have been a significant number of fatal and serious accidents in recent years, in industries in which it is likely that the potential for exposure to these hazards may increase.

Phase 1 & 2 of the waste/ recycling project was used to raise the profile of health and safety within the industry and highlight the areas that needed to be addressed. Supporting work by the Manufacturing Sector, the Waste Industry Safety and Health Forum (WISH) and the various representative bodies has re-inforced need for improvement and provided detailed guidance.

### **Operation of refuse and recycling collection vehicles in a pedestrian environment**

This builds upon the ground work carried out in phase 1 & 2 of the waste/recycling programme and provides inspectors with the tools to enforce standards that can eliminate/ reduce the risk of collection vehicles injury pedestrians (workers and members of the public).

Since the start of the waste/ recycling programme the industry has worked to introduce risk control measures, culminating in the publication of the guidance note “Waste and recycling vehicles in street collection.” This sets out an industry designed control strategy which has been successfully operated in several organisations. This initiative seeks to gain implementation of the measures outlined in the guidance, or equally effective measures.

### **Responsibility**

Check that senior officers are ensuring that policies and procedures are implemented and are effective.

### **Organisation**

Several organisations have reported that regular checks are needed to ensure that drivers of LGV's are and remain capable/ able to drive. Unreported motoring offences and endorsements have meant that in some cases disqualified drivers have continued to drive at work. If agency drivers are used then only accepting pre-screened drivers will help reduce delays when cover staff are required.

### **Hardware**

Municipal waste & recycling collection vehicles are unique in that they operate in close proximity to pedestrian workers and in environment in which there is no direct control of other pedestrians (members of the public). Adequate driver vision of the front, sides and rear of the collection vehicles will greatly reduce the risk of vehicles reversing into

pedestrians (MOP & workers), effective mirrors and closed circuit television (CCTV) help attain that standard.

The standard BS EN 1501-1: 1998 "Refuse collection vehicles and their associated lifting devices- General requirements and safety requirements" specifies the need for rear facing CCTV for refuse collection vehicles. Since other LGV collection vehicles operate in the same environment and in a similar way it is considered reasonable and practicable to apply the standard to a wider range of vehicles. Therefore, LGV collection vehicles engaged in kerbside collection with pedestrian workers and/or in areas where there is uncontrolled pedestrian access should be fitted with CCTV. Areas of uncontrolled pedestrian access could include residential areas, shopping areas, university campus's, hospitals etc.

Enforcement action should only be taken where it is likely the vehicle will reverse in areas of uncontrolled pedestrian access and/ or be serviced by pedestrian loaders.

The field of view of the CCTV is not defined in the European Standard. The 5m standard is based upon the experience of organisations using CCTV.

### **Route risk assessment**

Each collection round should be subject to a pro-active assessment of risk to ensure that all reasonably practicable controls are in place. This should then be supported by dynamic assessment to take into account the changing circumstances on the day of operation.

Assessments should be made of each round, considering variables such as street layout, reversing, pedestrian activity, congestion, weather, collection frequency, receptacles, vehicle size etc. The aim should be to ensure that pedestrians and vehicles are kept separate and that loaders can work in safety.

Assessment may lead to a change in the size of vehicle operated, change in collection frequency, collection times altered to avoid high risk areas such as schools, single or double sided collection, elimination of reversing operations, identification of high risk reversing operations etc.

The Environmental Services Association is currently drafting guidance to the industry on route risk assessment. It is anticipated that the Waste Industry Safety and Health Forum will consider this work.

### **Safe reversing**

Effective vision, detection devices, warning devices and other equipment can all help prevent vehicles and pedestrians coming into contact. However, it is recognised by HSE and industry that collection usually occurs in unique circumstances in that complete control cannot be exercised over the street environment nor members of the public (who may not recognise the risks or be able to take evasive action).

Risk assessment is likely to highlight that providing vehicles with reversing aids will not adequately control the risks during reversing. The WISH forum has identified that reversing assistants can greatly reduce the risk of pedestrians entering the reversing zone in these circumstances. See “Waste and recycling vehicles in street collection” (paras.75-95).

Reversing assistants are likely to be required for all crewed municipal waste/ recycling collection activities.

The role of a “reversing assistant” is well defined in the above guidance. The key feature of the role is to warn pedestrians not to enter the reversing zone and instruct the driver to stop if pedestrians are likely to enter the reversing zone. Reversing assistants are not “banksmen” and their role and title should not be confused. If loaders are required to give directional instructions to the driver then they should be provided with “banksmen” training.

All operations on the public highway are the responsibility of the driver. Therefore, inspection should ensure that the driver is aware of the role of reversing assistants, recognises when they should be deployed and that communications between driver and reversing assistant are clear and unambiguous. Particular attention should be paid to the arrangements when casual/ agency drivers and loaders are employed.

Inspection should include observation of reversing manoeuvres to ensure competence and safe systems of work.

## **Monitoring**

Phase 1 of the inspection initiative within the waste/ recycling industry found that the effective implementation of risk control measures such as safe systems of work can be compromised by a lack of front line supervision and monitoring. Inspectors should seek confirmation that robust safety management systems are in place to monitor systems for their use and effectiveness.

## **Hand sorting of recyclables (totting) with vehicle assistance**

There have been a number of fatal and serious accidents to pedestrian workers at waste/ recycling facilities caused by mechanical loading shovels. Typically, workers pick materials out of a stock pile which is “turned” to present new material by the vehicle. If the pickers are in close proximity to the vehicle there is clearly a risk of injury.

## **Safe site**

Elimination of the hazard is possible in many circumstances by mechanisation of the process. Trommels, magnets and other separating devices can be used. Inspection should seek confirmation that where reasonably practicable hand picking with vehicle assistance is eliminated.

## **Lighting**

Guidance on lighting levels is given within the Workplace Transport Inspection Pack.

## **Exclusion of non essential personnel & vehicles**

A properly managed sorting operation will have times when only vehicles operate in the picking area and times when only pedestrians are in the picking area. To ensure the system works non essential personnel and vehicles should be excluded from the areas. Guidance set out in HSG 136 is relevant.

The organisation of vehicle/ pedestrian movements should consider the tipping of loads, loading of vehicles in addition to the picking operation. Particular attention should be paid to tipping/ loading vehicles to ensure that these vehicles circulate safely.

## **Safe/ segregated/ protected zones**

Hand sorting is a cyclic process in which pedestrian pickers enter the picking area; work and then withdraw before the mechanical loading shovel “turns” the material. Providing a well demarcated and protected zone close to the picking area will give readily accessible, useable, physical protection to the pickers and an area in which the vehicle driver can see the pickers, ensuring that they are in the safe area before the vehicle approaches.

## **Effective visibility**

Mechanical loading shovels can have “blind spots” behind masts, cabs and in front of the bucket. Drivers should have adequate vision of the front, sides and rear of the vehicle by the provision of mirrors and/or CCTV.

## **Communication**

Drivers and pickers should have clear, unambiguous means of communicating with each other. Radios or the use of recognised hand signals is acceptable. Particular attention should be paid to casual/ agency drivers and pickers.

## **Safe system of work**

The picking operation should be observed to ensure that the safe system of work detailed in the guidance is used (or other equally effective measures).