1. **Bin collection**

Bin collection refers to the collection of waste or recyclables in wheelie bins, mobile garbage bins (MGBs) or mobile refuse bins (MRBs). The bins are collected from the kerbside or more rarely, from a residential property (‘back-door’ collection). Bins can be used to collect general refuse, recyclables or green/kitchen waste and come in a variety of sizes: typically 240 litres, 120 litres or 80 litres.

**IMPORTANT:** Kerbside semi-automated bin collections should only be undertaken from the left hand side of the road, unless a dual sided collection risk assessment has been performed and the risk of being hit by a vehicle is assessed as low.

**THE LAW:** Land Transport (Road User) Rule 2004 Rule 61001 (http://www.nzta.govt.nz/resources/rules/road-user-2004-index.html) states that a person must not ride in or on a vehicle, or in or on an object conveyed on a vehicle, in a manner or position that may be liable to cause injury to that person.

**IMPORTANT:** Every driver undertaking kerbside bin collections should be warranted as as ‘Waste Collection Traffic Leader’ (WCTL) as noted in the Code of Practice for Temporary Traffic Management (CoPTTM) Section D7.3 Kerbside Collection Activities.

**IMPORTANT:** Personal Protective Equipment (PPE) issued to workers undertaking any kerbside collection activities should comply with WCTL requirements.
PROSECUTIONS:

A company was fined $60,000 and ordered to pay reparation of $80,000 over the death of a worker who was hit by a vehicle while collecting rubbish. The company had pleaded guilty to a charge under a section of the Health and Safety in Employment Act that requires employers to take all practicable steps to ensure the safety of employees while at work.

The Department of Labour said the object of the Act was to promote the prevention of harm to everyone at work and nearby. This could be achieved by promoting excellence in health and safety management and to define hazards and harm in a comprehensive way.

The department said that "Hazard identification and control in the workplace are an integral part of keeping employees safe, as part of the employer’s responsibility under the Health and Safety in Employment Act." They went on to say that "The identification of hazards is not enough. All practicable steps must be taken to control hazards by elimination, minimisation or isolation to prevent employees from being harmed."

A company was fined $32,400 and ordered to pay reparation of $60,000 over the death of a non-rostered employee who was struck by a reversing waste collection truck.

The employee was on sick leave and was riding with the crew of the truck at the time of the incident.

The company plead guilty to a charge under Section 15 of the Health and Safety in Employment Act 1992 which states that every employer shall take all practicable steps to ensure that no action or inaction of any employee while at work harms any other person.

A driver of a rear loading compactor truck was charged and sentenced for careless driving causing the death of a fellow worker.

The driver reversed the truck whilst runners were on the rear step. One of the runners lost his balance and fell under the rear of the truck.

The driver’s sentence was two months of community service and the driver was disqualified from driving for six months.

The truck was fitted with reversing camera and audible warning devices.
Activities involved in bin collection

Bins are collected from the kerbside by rear load vehicles, side loaders or low entry vehicles (LEVs). Trucks are either semi-automated (fitted with a bin-lifter) or use an automated mechanical arm.

- Drivers of automated collection vehicles operate the bin lifter from inside the cab using a joystick. They must occasionally exit the truck to manoeuvre bins around obstacles.

- Semi-automated collection involves the driver or a runner alighting from the collection vehicle frequently to push or pull bins to the side or rear of the truck, placing the bin into or onto a bin lifter, then activating the lifter to invert the bin to tip the contents into the hopper. The bin is then lowered back to the ground and wheeled back to the kerbside.

- One person operators frequently alight from their collection vehicle to manually load bins into the hopper.

IMPORTANT: Operators or runners should never alight from a moving vehicle (see NZTA Road User Rule clause 7.1 (3)).

IMPORTANT: Runners should not travel on the outside of the vehicle at any time – regardless of truck type – if the vehicle is travelling at more than 25 kph.
**IMPORTANT:** Runners should not travel on the outside of a truck when it is reversing.

**Hazards**

There are a wide range of hazards associated with the collection of bins; these hazards can cause injuries such as strains and sprains, cuts and bruising. They include, but are not limited to:

- Traffic (vehicles following or turning; conflicting vehicle paths; cyclists) and collectors (cars turning into or emerging from driveways; road traffic; cyclists and mobility scooters on footpaths).
- Runners risk being struck by other vehicles, cyclists or by the collection vehicle.
- Collecting in adverse conditions including temperature and weather extremes (hot sun, severe frost, heavy snow, rain, high winds or in states of emergency), in poor lighting, poor visibility or a noisy environment.
- Clothing and electronic equipment which reduces peripheral vision, hearing ability or creates distraction (e.g. hoodies, MP3 players or mobile phones).
- Varying terrain, uneven or sloped surfaces, kerbs and channels, slippery steel manhole covers and wet grass.
- Hazards associated with road works and other infrastructure maintenance activities on a collection route.
- Hazards associated with properties accessed for back-door collection.
- Bins may be heavy and operators may sometimes need to move them manually.
- Operators alighting from the cab to manoeuvre bins risk slipping, tripping or falling when
Exiting the cab.

- Operators alighting from automated side-loading vehicles into the ‘live lane’ are exposed to vehicular traffic.
- Bins may be overloaded, or contents may have been spilt in high winds or by vandals, requiring clean-up (exposing the collector to the contents).
- Bins may contain a variety of flammable, corrosive or explosive waste such as hot ash, LPG cylinders, car batteries, used oil and other chemicals.
- Bystanders risk being struck by mechanical lifting arms when these are in use.
- Vehicular traffic associated with collecting bins from single and multiple-lane one-way streets.
- Some operators manually lift bins and tip them into the truck to save time, introducing potentially significant manual handling risks.
- Aggressive animals.

**ACTION POINT:** All hazards should be identified, assessed and recorded. Employees should be reminded regularly of all relevant hazards and the controls in place.

Pressure on operators to increase the speed of bin collection activities potentially increases the level of risk to which runners are exposed, and may encourage short cuts and unsafe practices (e.g. working at speed to lift, push, pull and move bins, or running across roads).

**IMPORTANT:** Discourage ‘job and finish’ arrangements and other employment terms and conditions that allow employees to maximise their wage rate by working faster. Company procedures should make allowance for collections to be performed
at a speed that is reasonable yet efficient, to avoid creating hazardous work conditions.

**Recommended good practice controls**

**ACTION POINT:** Implementing or addressing the following measures will help employers meet legal and good practice requirements.

**Vehicles and drivers**

- Drivers of kerbside collection vehicles should be trained and assessed on a regular basis.
- Vehicles should have signage and beacons that comply with the requirements of the CoPTTM.
- Trucks should be fitted with cameras to observe bin contents.
- Consider measures to protect runners and other pedestrians from being run over by the collection truck. Drivers should remain aware of the location of their runners to ensure that they can stop the truck without striking a runner who slips or trips. The inclusion of side intrusion bars may be a suitable control.
- Operators should follow documented procedures and industry guidelines for emergency situations such as fire in the truck and spills.
- Operators should follow documented procedures (e.g. Lock Out Tag Out) and industry guidelines for retrieval of non-conforming waste.

**IMPORTANT:** Operators should report contaminated waste incidents to
management and/or council. Actions to discourage or prevent contaminated waste incidents include enforcement by council, council or management communication with residents and not collecting and labelling prohibited items on the bin.

- Where the collection methodology involves more than one person per vehicle conducting the collections, a daily safety briefing should be held and documented.
- When mechanical lifting arms are in use, bystanders should be kept clear of the work area.
- Implement additional traffic management controls when collecting bins from single and multiple-lane one-way streets.

_Clothing, equipment and PPE_

- As weather conditions greatly affect the safety of kerbside collections, consider the impact of hot, cold, wet or dry conditions and extreme events such as heavy snow, severe frost, high winds or other states of emergency.
• It is recommended that appropriate PPE is available to operators (i.e. sun block, hat, long sleeves, eye protection from glare, and wet weather attire). For very hot or cold conditions, consider clothes that are comfortable to exercise in and help regulate body temperature, along with other items such as towels, a change of clothes and additional layers.

• Where hazards associated with terrain and surfaces (including kerbs and channels, slopes, manholes etc.) have been assessed as significant, workers must be provided with, and required to wear, appropriate footwear (sturdy, lightweight and comfortable with good traction).

MORE INFORMATION: Refer to Section 18 of these Guidelines for more information on Personal Protective Equipment.

IMPORTANT: Clothing and electronic equipment which reduces peripheral vision, hearing ability or creates distraction should not be worn or used while undertaking kerbside collections. Examples are hoodies, MP3 players and mobile phones.

Additional hazards en-route

• Identify and assess hazards introduced by road works and other infrastructure or amenities work on a collection route, and implement suitable controls.

• Identify and assess hazards associated with entering properties for back door collection, and implement suitable controls.
Manual handling

- Operators should consider methods to reduce exposure to manual handling hazards. This consideration may include reducing manual collection methods and the number of people involved in manual collection.\(^1\) It may also involve educating ratepayers and other user-pays customers about bin placement, to limit the need to manoeuvre bins around parked cars, trees, kerbing and other obstacles.

- Operators should adhere to correct manual handling practices if manoeuvring large or heavy bins.

- Operators should have systems in place to avoid manual handling or collection of overloaded bins.


IMPORTANT: Bins should not be manually lifted and tipped into the truck (e.g. to save time). Where operators and runners need to lift heavy items or lift items above shoulder height, mechanical assistance should be provided.

\(^1\) Automated bin collection has a critical health and safety advantage over other collection methods. The 2010 WasteMINZ Position Report “An Assessment of the Health and Safety Costs and Benefits of Manual vs Automated Waste Collections” reported a marked difference in the injury rates between manual and automated collection methods, with manual methods more likely to result in injury. Automated bin collection accounted for 46% of all collections, yet only 5% of the total injuries. Non-automated bin collection accounted for 17% of injuries.
Training


There are many methods of ensuring that employees receive appropriate training, for example:

- All drivers undertaking kerbside collections should be warranted WCTL operators.
- Every six months the Site Traffic Management Supervisor (STMS) should deliver refresher training for all kerbside collection workers on the Traffic Management Plan (TMP), or when the TMP is amended.
- Provision of clear, concise and safe Standard Operating Procedures (SOPs) including vehicle checklists and corrective action follow up.
- Induction and regular in house training courses and refresher sessions.
- All drivers should be trained in safe methods for alighting from the cab of their vehicle ensuring they:
  - Check their mirror for oncoming traffic prior to opening the door.
  - Exit the cab facing inwards.
  - Maintain three points of contact at all times.
  - Safely move themselves out of the ‘live lane’ and onto the footpath.
- Where left side drive vehicles are used, specific training and assessment in this
requirement should be completed.

- Specific health and safety training, e.g. driver training, *Lock Out* Tag Out and manual handling.

- Daily safety meetings discussing safe and correct operational practices.

Retention of appropriate training records – along with details of training providers and any refresher requirements – is strongly recommended.

**MORE INFORMATION:** To assist you with this process, *Appendix [number]* sets out examples of hazards associated with waste collection methods along with recommended control measures. The following table addresses additional hazards associated with bin collections.
### Table: Additional hazards for bag collection

This hazard register should be read in conjunction with ‘Appendix 7: Generic hazards associated with all waste collection methods’

<table>
<thead>
<tr>
<th>Work Activity or Area</th>
<th>Hazards</th>
<th>Describe Harm that Could Occur</th>
<th>Significant Hazard? (Yes/No)</th>
<th>Eliminate?/Minimise?</th>
<th>Control Measures</th>
<th>Review Frequency</th>
<th>Review Date</th>
</tr>
</thead>
</table>
| Generic bin hazards   | Running | • Serious harm  
• Minor injuries | Yes | Eliminate/Minimise | • Allocate enough time for the route to eliminate time pressure  
• Ensure collectors are wearing appropriate footwear e.g. runners might wear lightweight, sturdy footwear that provides good traction  
• Collectors should wear Hi-vis clothing ensuring they are compliant with the NZTA Code of Practice for Temporary Traffic Management  
• Undertake waste collection from the left-hand side of the road  
• No person is to alight from a moving vehicle  
• Runners to complete warm up exercises prior to commencing collections  
• Awareness training in avoiding uneven/slippery surfaces  
• Drink plenty of water to prevent dehydration, avoiding sugary drinks  
• Eat regular healthy meals, stay physically fit, get plenty of sleep, adhere to rest breaks to avoid fatigue |
### Table: Additional hazards for bag collection

This hazard register should be read in conjunction with ‘Appendix 7: Generic hazards associated with all waste collection methods’

<table>
<thead>
<tr>
<th>Work Activity or Area</th>
<th>Hazards</th>
<th>Describe Harm that Could Occur</th>
<th>Significant Hazard? (Yes/No)</th>
<th>Eliminate?</th>
<th>Isolate?</th>
<th>Minimise?</th>
<th>Control Measures</th>
<th>Review Frequency</th>
<th>Review Date</th>
</tr>
</thead>
</table>
| Generic bin hazards   | Manual Handling | • Serious harm  
• Minor injuries | Yes | Eliminate  
Minimise | • Ensure all collectors receive adequate training in manual handling ([Code of Practice for Manual Handling](#))  
• Collectors to wear fit-for-purpose gloves to prevent cuts  
• Bins should not be lifted by hand  
• Training in correct pushing, pulling and positioning should be provided | |
| Waste hazards         | Prohibited waste in bins | • | Yes | | • Labelling of prohibited items on the bin  
• Bins are identifiable with the property or customer (i.e. address label or serial number unique identifier)  
• Install camera to observe bin contents  
• Procedures for fire in the truck, spill  
• Procedures for retrieval of non | | |
<table>
<thead>
<tr>
<th>Work Activity or Area</th>
<th>Hazards</th>
<th>Describe Harm that Could Occur</th>
<th>Significant Hazard? (Yes/No)</th>
<th>Eliminate? Isolate? Minimise?</th>
<th>Control Measures</th>
<th>Review Frequency</th>
<th>Review Date</th>
</tr>
</thead>
</table>
| Kerbside collection  | Aggressive persons       | • Serious harm               | Yes                         | Isolate Minimise          | • Training for employees in conflict avoidance or management of aggressive people (if confronted by aggressive person retreat)  
• If unable to retreat, staff to contact police |                 |             |
| Kerbside collection  | Dogs                     | • Serious harm               | Yes                         | Isolate Minimise          | • Training for employees in management of aggressive dogs  
• If confronted with aggressive dog/s contact the local Territorial Authorities Animal Control Department (or equivalent)  
• Appropriate leg protection and fit for purpose gloves are the recommended PPE to reduce injury from serious dog bites |                 |             |
| Generic bin hazards  | Bystanders               | • Serious harm               | Yes                         | Eliminate Isolate        | • Operator to check that no person is between the vehicle and MGB before operating the bin lifter  
• Operator or runners to ensure bystanders are clear of danger areas before commencing lifting activities |                 |             |