

Good practice guidelines for collecting waste on cycle lanes

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The information contained in these guidelines is freely available for use, provided this source is acknowledged.

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About WasteMINZ

WasteMINZ is the largest representative body of the waste, resource recovery and contaminated land sectors in New Zealand. Formed in 1989, it is a membership-based organisation with over 1,000 members – from small operators through to councils and large companies.

As the authoritative voice on waste, resource recovery and contaminated land issues in New Zealand, WasteMINZ seeks to achieve ongoing and positive development of the industry through strengthening relationships, facilitating collaboration, knowledge sharing and championing the implementation of best practice standards.

Disclaimer

Every effort has been made to ensure that these guidelines are as comprehensive and accurate as practicable; however, WasteMINZ will not be held responsible for any action arising out of their use. If the reader is uncertain about issues raised in these guidelines, they should refer to the Health and Safety at Work Act 2015, The official New Zealand code for cyclists 2016, Land Transport (Road User) Rule 2004 and other applicable legislation, guidelines and bylaws, and seek further expert advice as necessary.

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1. Introduction

There are an ever-growing number of people on bikes (including e-bikes) in New Zealand and the amount of cycling infrastructure is increasing. People on bikes and cycling infrastructure can present a number of hazards to waste collection vehicle operators when they are carrying out kerbside collection activities, and in turn these operators can present hazards to people on bikes. These guidelines will address these areas and are targeted at waste collection companies, Road Controlling Authorities, territorial authorities (who operate or contract out their waste collection services), the New Zealand Transport Agency, cycling advocacy groups, roading engineers, WorkSafe New Zealand and the New Zealand Police's Commercial Vehicle Safety Team.

What are guidelines?

Guidelines offer recommendations of good practice within a sector. Although not legally binding, guidelines are admissible in court and may be used in evidence of good practice.

What do the symbols in the Guidelines mean?



THE LAW: Indicates that there is a legal obligation and refers to a specific piece or pieces of legislation



ACTION POINT: Provides suggestions on what could or should be **implemented** in order to meet good practice



IMPORTANT: Highlights or summarises key messages

Interpretation

Use of the words 'must', 'ensure' or 'require' in the context of a legal requirement indicates that compliance is *compulsory*.

Use of the word '**should**' indicates a *recommended* course of action. The Guidelines intend a good practice imperative here, rather than a legal one. An alternative and equally effective method of achieving a safe workplace can be chosen, but the suggestions in these guidelines are considered a minimum requirement.

2. Kerbside cycle lanes, protected cycle lanes and cycle paths

There are two main types of cycling infrastructure:

Cycle lanes:

- Kerbside cycle lanes may or may not be physically separated from parking or other traffic lanes. They are uni-directional only (in the direction of adjacent traffic flow).
- Protected cycle lanes are physically separated from parking or other traffic lanes by an island with raised kerbs, bollards or other vertical features. They may be uni-directional (in the direction of adjacent traffic flow) or bi-directional.

Cycle paths:

- On-road cycle paths are usually located adjacent to a footpath. They are built at
 a lower level than the footpath but a higher level than the adjacent road. They
 have kerbs running beside them, both between the footpath and adjacent traffic
 lanes.
- Off-road cycle paths are usually built away from the road carriageway and, if adjacent to a road, will be physically separated (at a different level or by a buffer or barrier). Off-road cycle paths may also be used by pedestrians.



Figure 1: Cycle lane outside parking



Figure 2: Cycle lane



Figure 3: Protected cycle lane



Figure 4: Protected cycle lane (bi-directional)



Figure 5: Cycle path



Figure 6: Kerbside waste collection vehicle straddling a cycle lane to collect waste

Design and operations

- The primary aim of 'safety in design' is to pre-emptively identify and manage risks. Safety in design is a process that integrates hazard identification and risk assessment methods early when designing the collection methodology process; to eliminate or minimise the risks of injury to those who will construct, operate, maintain, decommission and demolish the asset.
- The opportunity to eliminate a hazard in the early design stages by involving all stakeholders, and considering the life cycle of the project, is recommended.



IMPORTANT: The Road Controlling Authority should consult with territorial

authorities (who operate or contract out their waste collection services) and waste collection companies when identifying suitable locations for cycling infrastructure lanes, designing the cycling infrastructure, and identifying and managing the risks of the cycling infrastructure. The Road Controlling Authority should also consult with the council, waste collectors and the affected community on correct bin placement before the cycling infrastructure is installed.

Hazards

Collecting waste that has been placed on or near cycling infrastructure can create hazards, which may include the following:

- Kerbside waste collection vehicle operators being struck by people on bikes as they
 leave the vehicle and enter the cycle lane to collect waste
- People on bikes running into stationery kerbside waste collection vehicles as the waste is being collected
- People on bikes running into the hydraulic arm on a side loading vehicle as it is
 lowered to collect materials from a waste receptacle
- Cars parking in cycle lanes, blocking access to the waste receptacles
- Residents and businesses placing their waste receptacles in the cycle way, blocking access for people on bikes
- People on bikes entering a live lane, if the cycle lane is blocked



ACTION POINT: The following measures will help kerbside waste collection vehicle operators meet good practice:

 Kerbside waste collection vehicle drivers should straddle painted or vertical features on protected cycle lanes, if possible, thereby blocking the cycling lanes (claiming the lane) from people on bikes

- Kerbside waste collection vehicle drivers should operate the vehicle inside the kerbside cycle lanes, therefore blocking the cycle lanes (claiming the lane) from people on bikes
- Check rear-view mirrors and look over your shoulder for people on bikes before you open your door
- There should be a five metre exclusion zone around a waste receptacle before it is emptied. If a cyclist is approaching or within the exclusion zone, stop work until the cyclist is outside the exclusion zone
- Raise hazards regarding cycle lanes at toolbox talks and driver meetings and discuss how these should be managed
- Collect waste along busy and key cycle routes at off peak times to minimise possible conflicts



ACTION POINT: Waste collection companies should contact their road controlling authorities and ask to be added to the authority's cycling lanes consultation list.



IMPORTANT: Council and waste collectors should be carrying out education and engagement campaigns with residents and businesses about placement of waste receptacles near cycling infrastructure.

3. Legislation, codes, rules and bylaws



THE LAW: Kerbside waste collection vehicle operators **must ensure** they are aware of and comply with relevant legislation. This includes but is not limited to:

- Health and Safety at Work Act 2015
- Health and Safety at Work (General Risk and Workplace Management)
 Regulations 2016
- Land Transport (Road User) Rule 2004
- Relevant bylaws from territorial authorities and unitary councils



IMPORTANT: Kerbside waste collection vehicle operators should be aware of and comply with the relevant codes. They include, but are not limited to:

- <u>Code of Practice for Temporary Traffic Management</u>
- The official New Zealand road code for heavy vehicle drivers

4. Training



THE LAW: Section 9 of the <u>Health and Safety at Work (General Risk and Workplace Management) Regulations 2016</u>, states that *A PCBU must ensure, so far as is reasonably practicable, that every worker who carries out work of any kind, uses plant of any kind, or deals with a substance of any kind that is capable of causing a risk in a workplace—*

- (a) either—
 - (i) has adequate knowledge and experience of similar places, and work, plant, or substances of that kind, to ensure that the worker carrying out the work, using the plant, or dealing with the substance is not likely to adversely affect the health and safety or cause harm to the worker or any other person; or
 - (ii) is adequately supervised by a person who has that knowledge and experience; and
- (b) is adequately trained in the safe use of—
 - (i) all plant, objects, substances, or equipment that the worker is or may be required to use or handle; and
 - (ii) all personal protective equipment that the worker is or may be required to wear or use.

As noted in Section D7.3 of the <u>Code of Practice for Temporary Traffic Management</u> (CoPTTM):

- All waste collection vehicle drivers must be trained as a Kerbside Collection Traffic leader (KCTL), a New Zealand Transport Agency (NZTA) qualification that is unique to the waste industry
- Training must be carried out by an NZTA qualified CoPTTM trainer

- New drivers must obtain this qualification within four months of commencement of employment
- Drivers must carry their KCTL warrant card when operating a kerbside collection vehicle
- The qualification must be renewed every three years.



ACTION POINT: It is recommended that kerbside waste collection vehicle operators wanting to learn more about mitigating on-road difficulties between people on bikes and kerbside waste collection vehicle operators attend the Cycling Action Network's Share the Road Campaign Driver Trainer workshops, which are run throughout New Zealand.

5. Signage



IMPORTANT: According to Section D7.3 of the <u>CoPTTM</u>, all vehicles involved in a kerbside collection activity must display the following signage:

- A retro-reflective panel (red/white) across the rear of the vehicle ... Gaps and variations are permitted where the vehicle's rear section is broken by loading features. Where hatching cannot be placed the full width of the vehicle, additional depth of hatching ie 300-500mm, should be applied, where practicable.
- Each vehicle must have installed, at the front, one operating amber beacon and to the rear two amber beacons. The beacons to the rear are to be installed to the highest most practical extremes of the vehicle. The vehicle's hazard warning lights (flashers used in emergency mode) must not be used as amber beacons.
- An operational rear-mounted camera with an active monitor in the cab for the driver.
- A TV4 PASS WITH CARE sign. This sign must comply with the Land
 Transport Rule: Traffic Control Devices 2004 (TCD Rule), the shape and size is a rectangle 900x450mm.

6. Traffic Management Plan

An operator who is carrying out kerbside collection activities must have a Traffic Management Plan (TMP). A TMP is governed and monitored by a Road Controlling Authority and it needs to include the following:

- How risks associated with people on bikes will be managed
- How waste will be collected, on or near cycling infrastructure.

According to Section D7.3 of the <u>CoPTTM</u>, the TMP must be prepared by a Site Traffic Management Supervisor (STMS) and the approved TMP must be available and kept in the vehicle at all times.

The operator who is carrying out kerbside collection activities must be briefed on the TMP in accordance with the <u>CoPTTM</u>.

7. Sharing the road with people on bikes

Hazards

People on bikes can present a number of hazards for kerbside waste collection vehicle operators, which may include the following:

- Being distracted by;
 - texting or talking on a mobile phone while cycling
 - o fatigue, impairment or stress
 - wearing head phones while cycling
- Losing control of their bike due to;
 - looking down instead of forward when cycling
 - pot holes or debris on the road
 - o speed, inadequate maintenance of bicycle, wet or icy roads
- Not understanding the operation and blind zones of heavy vehicles, which may cause them to;
 - o pass a waste collection vehicle on the left hand side of the vehicle
 - o ride in a waste collection vehicle driver's blind spot (which can be the full length of the vehicle)
 - o pull out in front of a waste collection vehicle
 - o overtake a waste collection vehicle when it is pulling out from the kerbside
 - o swerve, brake or change direction too quickly for the driver to react in time

Kerbside waste collection vehicle operators can also present a number of hazards for people on bikes, which may include the following:

- Being distracted by;
 - o screens, radio, mobile phone in the vehicle

- o fatigue, impairment or stress
- o actions of other road users
- o road layouts that do not provide clear information on what to do
- Failing to see people on bikes due to;
 - o poor visibility due to weather conditions or the time of day
 - cyclists wearing clothing that do not contrast with the surroundings
 - o poor or no lights or reflectors on the bicycle
 - looking for gaps between vehicles to pull into and not noticing the cyclist in the gap
 - o cyclists being hidden behind vehicles, foliage, signage and parked cars
 - o not taking into account blind zones around their vehicle
- Operating the vehicle and/or equipment in a way that causes injury such as;
 - o opening a vehicle door wide enough to hit a cyclist when they are overtaking the vehicle
 - o not using indicators when pulling out from the kerb
 - coming from the opposite direction of the cyclist, then turning right in front of the cyclist
 - o not checking for people on bikes before leaving the kerb
 - cutting corners
 - passing a cyclist at high speed and creating wind, which can make it difficult for people on bikes to control their cycles
 - passing a cyclist, then turning left straight away
 - o replacing waste receptacles in an unsafe location where they may create an obstacle for people on bikes, e.g. on the cycling infrastructure
 - waste being left behind on the cycling infrastructure
 - driving too closely to a cyclist when overtaking

 lowering the hydraulic arm on a side loading vehicle across the cycling infrastructure to collect materials from a waste receptacle or placing the waste receptacle back after collection.



ACTION POINT: The following measures will help kerbside waste collection vehicle operators meet good practice:

- Slow down and allow at least 1.5 metres of space between you and the cyclist when passing
- Check rear-view mirrors and look over your shoulder for people on bikes before you open your door
- Take another look at intersections; cycles are smaller than other vehicles and can be hidden in a mirror or door pillar
- Avoid overtaking a cyclist just before you turn left at an intersection, slow down and turn behind the cyclist
- Indicate clearly and in plenty of time when turning and stopping
- There should be a five metre exclusion zone around a waste receptacle before it is emptied. If a cyclist is approaching or within the exclusion zone, stop work until the cyclist is outside the exclusion zone
- Raise hazards regarding people on bikes at toolbox talks and driver meetings and discuss how these should be managed
- Check rear-view camera before pulling away from the kerbside
- Collect waste along busy and key cycle routes at off peak times to minimise possible conflicts
- Replace waste receptacles in a safe location outside of the cycling infrastructure, where possible.



IMPORTANT: The blind zone can be the full length of the vehicle, leaving kerbside waste collection vehicle operators unable to see anyone cycling beside them on the left.

8. Appendix 1: Definitions¹

Hazard includes a person's behaviour where that behaviour has the potential to cause death, injury, or illness to a person (whether or not that behaviour results from physical or mental fatigue, drugs, alcohol, traumatic shock, or another temporary condition that affects a person's behaviour) (Health and Safety at Work Act 2015).

Kerbside collections: A service provided to households and businesses, typically in urban and suburban areas, where households' and businesses' refuse and recyclables, left at the kerbside in wheeled bins, crates or bags, are collected by personnel using purpose built vehicles.

Person conducting a business or undertaking (PCBU): A PCBU is a 'person conducting a business or undertaking'. While a PCBU may be an individual person or an organisation, in most cases the PCBU will be an organisation (for example, a business entity such as a company). An individual, such as a sole trader, can also be a PCBU. While the terms 'business' and 'undertaking' are not defined in HSWA, they usually mean the following:

- Business is an activity carried out with the intention of making a profit or gain
- Undertaking is an activity that is non-commercial in nature, for example, a government department or a local council.

Individuals or organisations can be PCBUs if they carry out work, regardless of their legal structure. The following are examples of PCBUs:

- A business in the form of an incorporated company.
- A sole trader or self-employed person.
- A general partner in a partnership (if the partnership is a limited partnership).
- A partner in a partnership (if the partnership is not a limited partnership).

An organisation created by legislation (e.g. government department, university, school or local authority).

¹ All definitions that relate to legislation are correct as of July 2017

Reasonably practicable: That which is, or was, at a particular time, reasonably able to be done in relation to ensuring health and safety, taking into account and weighing up all relevant matters, including -:

- a. the likelihood of the hazard or the risk concerned occurring; and
- b. the degree of harm that might result from the hazard or risk; and
- c. what the person concerned knows, or ought reasonably to know, about
 - 1. the hazard or risk; and
 - 2. ways of eliminating or minimising the risk; and
- d. the availability and suitability of ways to eliminate or minimise the risk; and
- e. after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk (Health and Safety at Work Act 2015).

Risk: The likelihood that a hazard will actually cause its adverse effects, together with a measure of the effect (Health and Safety Executive website, 2016).

Risk assessment: The overall process of estimating the magnitude of risk, based on the likelihood and consequence of exposure by a worker.

Worker: Unless the context otherwise requires, a **worker** means an individual who carries out work in any capacity for a PCBU, including work as –

- a. An employee; or
- b. A contractor or subcontractor; or
- c. An employee of a labour hire company who has been assigned to work in the business or undertaking; or
- d. An outworker (including a homeworker); or
- e. An apprentice or a trainee; or
- f. A person gaining work experience or undertaking a work trial; or

- g. A volunteer worker; or
- h. A person of a prescribed class.

A PCBU is also a worker if the PCBU is an individual who carries out work in that business or undertaking (Health and Safety at Work Act 2015).

9. References

Code of Practice for Temporary Traffic Management

Health and Safety at Work Act 2015

Health and Safety at Work (General Risk and Workplace Management) Regulations 2016

Land Transport (Road User) Rule 2004

The official New Zealand road code for heavy vehicle drivers