

Introduction

The Solid Waste Management and Minimisation Bylaw (2020) was introduced by Wellington City Council with effect from 25 January 2021.

Following the introduction of the bylaw, new Multi-Unit Developments (MUDs), with 10 or more residential units, are required to provide suitable storage areas for waste and recycling generated on-site.

Waste storage and servicing standards are necessary to protect urban amenity and prevent public nuisance and hygiene issues caused by the mass piling of waste on the kerbside within Wellington City. They will also help to prevent MUD servicing access issues, and ensure that MUD residents have the necessary space to sustainably manage, divert, and minimise their waste.

Definition of a Multi-Unit Development (MUD)

A multiple tenancy property comprising of 10 or more separately occupied residential units, whether in the same building or in separate buildings, owned jointly or separately. This includes a unit title development, a mixed-use premises with business activities (ie. an office building), and any development with controlled or restricted access, such as a gated community.

How to use this guide

This guide outlines the regulatory requirements of the bylaw, and provides good practice guidance on how these new waste storage and servicing standards can be complied with.

It is intended to be used as a planning resource for developers and building managers/owners when designing or renovating MUDs.

How the bylaw affects the development of MUDs

The Solid Waste Management and Minimisation Bylaw (2020) states that the owner and/or the manager of a MUD of 10 units or more must arrange for the management of all waste, recycling and organic waste generated on site and within the premises of the MUD.

This includes:

- Providing adequate areas for storage of waste receptacles.
- Providing adequate areas for the collection/emptying of waste receptacles.
- Provision of regular collection services for waste disposal and recycling.

A Waste Minimisation and Management Plan addressing the above must be submitted to the Wellington City Council and approved before the construction of, or change of building use into a MUD begins.

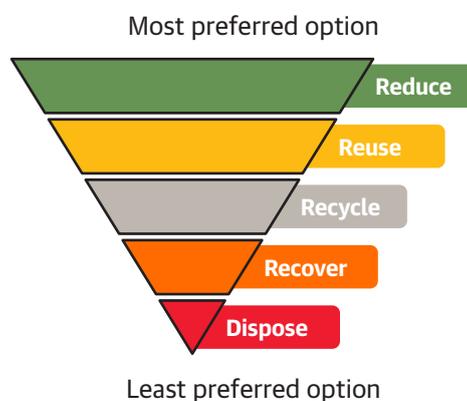
Waste Minimisation and Management Plan requirements

A MUD Waste Management and Minimisation Plan must include, but is not limited to, the following information:

- ① Identification of the person/s responsible for the management, collection and disposal of waste.
- ② The methods to be used for the management, collection, and disposal of waste.
- ③ Scaled drawings identifying an adequate area on the premises for the storage of receptacles that is readily accessible to the occupiers of units. Scaled drawings should further illustrate:
 - The dimensions of the waste storage area.
 - The proposed location of all waste and recycling receptacles within the waste storage area, and, if kerbside collection is required:
 - The proposed location and alignment of waste receptacles for kerbside presentation.
 - Identification of entry and exit points, as well as access and routes to the waste storage area.
- ④ Identification of an adequate area on the premises for the waste collector to enter and to enable separate collection and transportation of waste, recycling and organic material.
- ⑤ An estimate of the types and volumes of waste that will be generated on the premises.
- ⑥ How waste generated within the premises is to be minimised by employing the waste hierarchy below, and the steps to maximise the collection and use of recyclables, organic waste, and reusable material.
- ⑦ The methods to be used within the waste storage area to:
 - Minimise noise.
 - Minimise odour.
 - Ensure appropriate ventilation.
 - Keep the area hygienic.
 - Keep the area free from vermin or other pest infestations.
 - Keep the area secure.

Waste hierarchy

The waste hierarchy is a framework for establishing the order of preference for different waste management options. This hierarchy must be considered when developing a MUD Waste Minimisation and Management Plan.



Planning a waste storage and servicing area

In order to develop a MUD Waste Management and Minimisation Plan, it is necessary to understand what types of waste likely to be generated that are accepted for collection in Wellington City, and what amount of space will be adequate to store and service MUD waste.

Types of waste and recycling receptacles

A range of waste materials are likely to be generated that are accepted for collection in Wellington City. These include general waste, co-mingled recyclables, and colour sorted glass. For more guidance on what can and can't be recycled, go to: www.wellington.govt.nz/waste-search

Table 1. Types of waste accepted for rubbish and recycling collection in Wellington City

Waste stream	Typical recyclable material
Co-mingled recycling	Plastics 1, 2, 5, cans, tins, cardboard and paper
Colour sorted glass. Separate containers for:	Glass bottles and glass jars only Must be separated by colour
• Green	No mirrors, window panes, broken bottles or jars
• Clear	
• Brown	
General rubbish	All other household waste*

*Hazardous waste is not accepted (eg. batteries, light bulbs, paint/solvents etc)

How to determine an adequate area for waste storage and servicing

The Solid Waste Management and Minimisation Bylaw requires that an adequate area be provided for the storage and servicing of waste, recycling and organic waste generated within the MUD.

Table 2 provides benchmarks for calculating an adequate communal waste storage and servicing area relative to potential MUD occupancy. In order to future proof our housing stock the calculations below take into account the waste storage and servicing space requirements necessary to accommodate future waste diversion requirements such as food waste collection.

Given the types of residential waste and recycling collected in Wellington City (see **Table 1**), **Table 2** also allows for the space necessary to separate out green, clear and brown coloured glass from the storage of co-mingled recycling. Practical issues such as resident and wheelchair user accessibility, as well as waste receptacle manoeuvrability, have also been factored into these storage capacity estimates.

It is noted that, within the Wellington City context the Solid Waste Management and Minimisation Bylaw (2020) requirement to provide an adequate storage and servicing area for waste, recycling, and other potential future waste diversion requirements such as food waste collection, is in addition to the minimum requirements of the Building Act 2004 and the New Zealand Building Code.

Table 2. Weekly waste and recycling storage receptacle capacity requirements (estimates in litres)

No. of bedrooms	Estimated weekly co-mingled recycling volume (litres)	Estimated weekly glass volume (litres)			Estimated weekly residual waste volume (litres)*
		Green	Clear	Brown	
10	360	120	60	60	600
15	540	180	90	90	900
20	720	240	120	120	1200
25	900	300	150	150	1500
30	1080	360	180	180	1800
40	1440	480	240	240	2400
50	1800	600	300	300	3000
60	2160	720	360	360	3600
70	2520	840	420	420	4200
80	2880	960	480	480	4800
100	3600	1200	600	600	6000

*Future waste diversion activities may reduce this volume (eg. introduction of a kerbside organic collections could reduce this volume between 15% - 30%)

Table 3. Waste storage area guidance

No. of bedrooms	Estimated floor area** for waste area that is cleared weekly			
	140 litre bins used for all waste streams	240 litre bins used for all waste streams	240 litre bins for co-mingled recycling/ 140 litre bins for glass/ 660 litre bins for waste	660 litre bins for co-mingled recycling/ 240 litre bins for glass/ 660 litre bins for waste
10	9.2 m ²	8.6 m ²	7.4 m ²	8.2 m ²
15	13.9 m ²	10.8 m ²	11.2 m ²	10.5 m ²
20	16 m ²	11.6 m ²	11.2 m ²	13.0 m ²
25	22.0 m ²	15.6 m ²	16.8 m ²	16.2 m ²
30	24.4 m ²	17.8 m ²	17.8 m ²	16.2 m ²
40	Inefficient	20.6 m ²	22.0 m ²	20.8 m ²
50	Inefficient	28.5 m ²	28.5 m ²	26.0 m ²
60	Inefficient	31.6 m ²	32.4 m ²	30.4 m ²
70	Inefficient	Inefficient	36.5 m ²	34 m ²
80	Inefficient	Inefficient	Inefficient	38.6 m ²
100	Inefficient	Inefficient	Inefficient	48.2 m ²

The size of the waste room is calculated using the estimated waste streams produced as per **Table 2 and considers the area of receptacles proposed for the different waste stream. The calculated size is then multiplied by a factor of 2.35 to account for bin manoeuvre areas, clear paths to access the bins and spare capacity for future waste diversion activities (eg. organic waste separation)

Design constraints to consider

When designing a waste storage and/or servicing area, it will also be necessary to take into account the frequency of servicing, as well as the size and storage space requirements necessary to accommodate a waste receptacle. **Table 4** details a range of waste receptacle types and their dimensions.

When making decisions about waste or recycling receptacle to use and where, please note that the issues of health and safety must also be considered. For this reason, the Council has set the following restrictions:

- Receptacle sizes for waste and mixed recycling are limited to a maximum of 660 litres due to health and safety concerns associated with manual handling.
- Receptacle size for glass is limited to a maximum of 240 litres due to health and safety concerns associated with manual handling.

Table 4. Typical waste receptacle dimensions

Receptacle type	Receptacle dimensions
Bags	0.4 m x 0.4 m
80L bin	0.53 m x 0.45 m
140L bin	0.65 m x 0.54 m
240L bin	0.73 m x 0.6 m
660L bin	1.26 m x 0.78 m
45L glass crate	0.53 m x 0.45 m
Fadge	0.8 m x 0.8 m

Planning and assessment considerations

Matters to consider when planning and designing a waste storage area include resident and servicing accessibility, noise, odour, hygiene issues, vermin, the potential for negative impacts on the health, safety, environment, and security.

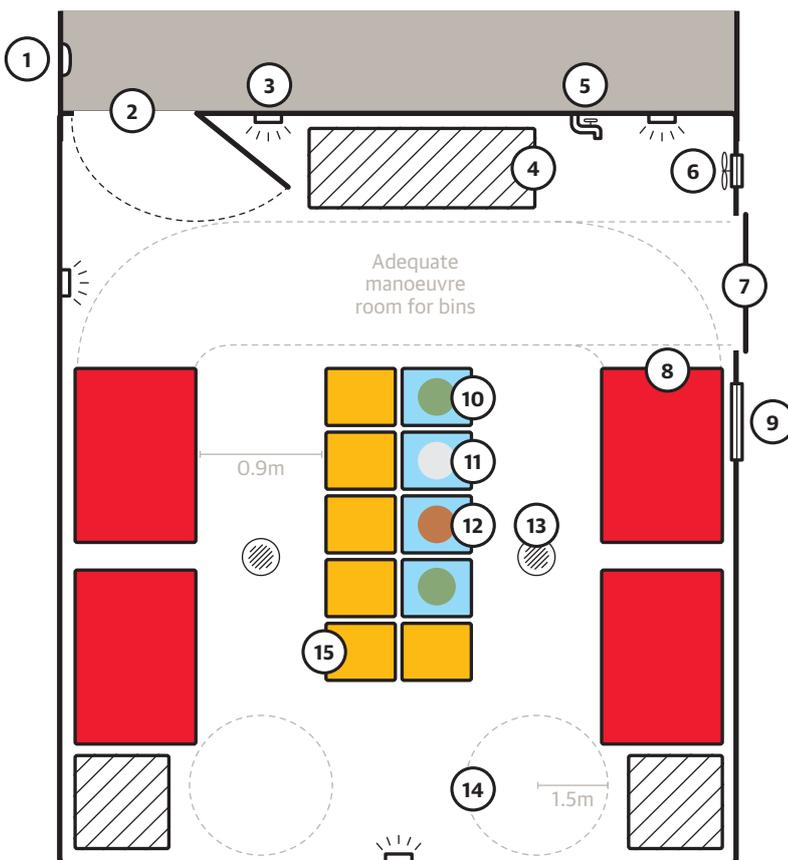
These matters must be considered and addressed within any MUD Waste Minimisation and Management Plan application submitted to the Council.

Accessibility

For accessibility reasons, an adequate waste and recycling storage area needs to be located on the ground floor or in a basement area. Additional waste and recycling storage may also be necessary to ensure that the maximum waste carry distance between any occupancy and common waste and recycling storage area does not exceed 30 metres.

Potentially, waste and recycling receptacles may be located at the side or rear of a property, but the area must be fully contained within the site of the development and not be located on public land or roadway. When located outside, receptacles will need to be visually screened from the street view.

All waste and recycling receptacles must be located in a manner that is fully accessible to their users. For this reason waste receptacles should not be located behind each other.



Typical waste room layout

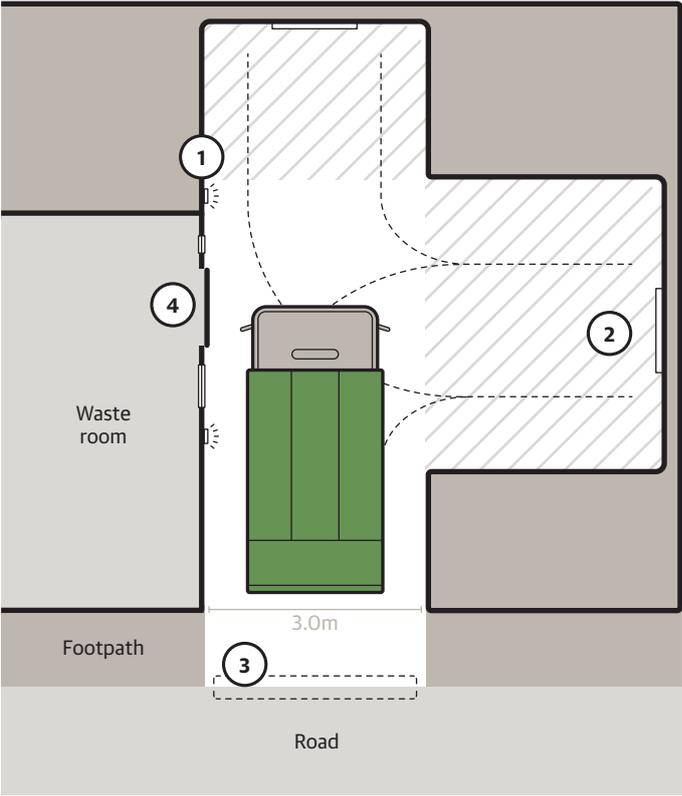
(40 bedroom MUD)

- ① Fire alarm
- ② Internal access (secured)
- ③ Adequate lighting
- ④ Space for future waste separation streams
- ⑤ Pipe/hose for cleaning/fire fighting
- ⑥ Active ventilation
- ⑦ External access (secured)
- ⑧ General rubbish (660L bin)
- ⑨ Windows for ventilation if needed
- ⑩ Glass - green (240L bin)
- ⑪ Glass - clear (240L bin)
- ⑫ Glass - brown (240L bin)
- ⑬ Drainage connection to sewer
- ⑭ Adequate turning space for wheelchair
- ⑮ Co-mingled recycling (240L bin)

Depending on the constraints of the site, a waste storage area may or may not be suitable for vehicle access. If vehicular access is provided, the area should:

- Allow the service vehicle to enter and leave the site without reversing.
- Provide adequate headroom to allow the service vehicle to enter and clear waste.
- Be well-lit to assist clearing operations.

Collections should also be timed to minimise noise for residents.

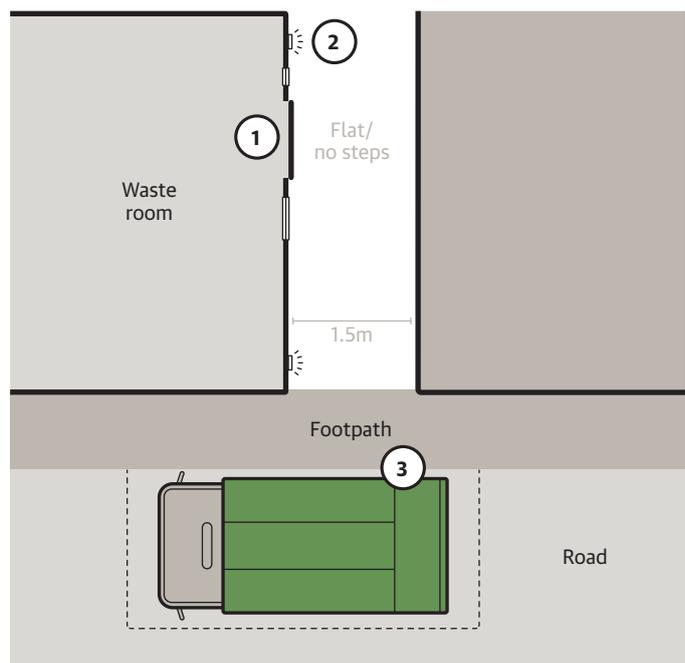


Vehicle access to waste room

- ① Adequate lighting
- ② Adequate turning area for service vehicle to exit site facing forward with adequate No Parking/Keep Clear signs
- ③ Appropriate vehicle crossing
- ④ External access to waste room (secured) - flat/no steps

If there is no vehicular access to the waste storage area, then the potential impacts on the safety and efficiency of the immediate roading network will need to be considered. This should include the consideration of:

- The methodology of clearing the material ensuring minimum disruption to users of public land. eg. the footpath.
- The location of a safe area for vehicles to stop whilst clearing waste or recycling without disrupting traffic flows, eg. proximity of loading zones to the site.
- The timing of collections to minimise disruption to traffic flows and minimise noise.



No vehicle access to waste room

- ① External access to waste room (secured) - flat/no steps
- ② Adequate lighting
- ③ Ideally loading zone in close proximity to assist vehicle parking during clearing operations

Functionality of waste receptacles

All waste and recycling receptacles used for communal waste and recycling should be fitted with permanent lids that can be easily opened. These receptacles must be able to accommodate the amount of waste and recycling generated on the premises between collections.

Signage

Clear signage is required within the waste storage area to encourage correct recycling and reduce contamination. This signage should:

- Clearly identify what items are and are not accepted in the general waste and recycling systems. If signage within a waste storage area is not possible, the use of waste stream identification stickers may be appropriate.
- Outline appropriate waste management behaviour (eg. placing rubbish/recyclables inside as opposed to adjacent to waste receptacles, colour sorting glass, placing recyclables directly into the appropriate waste receptacle (not in a plastic bag), closing waste receptacle lids, etc.
- Identify any hazards or potential dangers associated with the waste facilities.

- Use standardised colours for waste receptacles and labels, as outlined by WasteMinz (**Table 5**): www.wasteminz.org.nz/projects/standardising-the-colours-of-mobile-waste-and-recycling-containers
- Include information in English, as well as other languages if necessary.
- Downloadable signage templates for labelling waste streams within MUD storage areas are available at www.wellington.govt.nz/mud

Table 5. Standardised colours for waste receptacles and labels

Material Type	Colour
Rubbish	 Red
Co-mingled recycling	 Yellow
Glass	 Blue*
Food waste	 Lime green
Garden waste	 Dark green

*Can use other colours for colour sorting purposes (eg. brown, green and clear)

Noise

The main sources of noise associated with waste management include the emptying of recyclable materials into collection vehicles and vehicle noise, especially reversing alarms. These sounds can be a significant nuisance for residents and neighbours. Below is a list of planning considerations for reducing noise:

- Whenever practicable, locate waste and recycling storage areas and collection points as far away as possible from residents.
- Eliminate the need for collection vehicles to reverse.
- Consider how waste and recycling material will be transferred into waste receptacles in the storage area.
- Ensure the waste storage area is as noise proof as possible.
- Select appropriate surfacing materials that will assist in minimising noise for pathways and driveways that waste receptacles will need to be wheeled over.

Odour

Waste storage areas should be well ventilated to minimise odours. When considering ventilation, the following should be taken into account:

- The area flowing from any enclosed waste storage areas should not exit close to residences.
- Ventilation openings should be located as near the ceiling and/or floor as possible, and away from the windows of dwellings.
- Ventilation openings should be protected against flies and vermin.
- If a forced ventilation system is used (for enclosed storage areas), it should not be connected to the same ventilation system supplying air to the units.

Hygiene

Communal waste storage areas need to be easy to clean, with access to water (a tap and a hose) with drainage into the sewer instead of stormwater systems. Appropriate drainage should be located under cover to prevent rainwater in flows.

Plans should also be made for:

- The frequency of cleaning, and procedures for cleaning of waste receptacles (eg. if they can be cleaned on site or if they need to be collected and moved to another area).
- Assigning responsibilities for keeping communal areas clean, including responsibilities for the regular cleaning of floors and walls within the waste storage rooms, and the waste collection exit route onsite.

Vermin

Waste should be sealed in containers to deter vermin and pests, as well as to keep the storage area as hygienic as possible. Plans should be made for:

- Keeping waste collection and storage areas free of clutter and dumped waste.
- Ensuring waste receptacles do not sit open for extended periods of time.
- Other methods for preventing vermin getting into waste collection and storage areas.

Security

Crime prevention through environmental design (CPTED) principles can be applied to the design of communal waste storage areas. The four CPTED principles are:

- Surveillance - Allow people to see what others are doing by ensuring clear sightlines and providing adequate lighting.
- Access control - Establish physical and symbolic barriers to attract, channel or restrict the movement of people.
- Territorial reinforcement - Create a sense of community ownership to promote use and discourage antisocial behaviours.
- Space management - Manage and maintain spaces to ensure that space is appropriately utilised and well cared for, ie. repair or removal of vandalism and graffiti, replacement of burnt out lighting and removal of litter.

Other security considerations should include:

- Allowing and encouraging easy access for residents and building management whilst restricting general public.
- Locating waste receptacles in the storage area away from public thoroughfares.
- Design of lockable waste storage areas.
- Ensuring communal waste storage areas are sufficiently open and well-lit to allow safe use after dark.
- The installation of an open rail gate backed with welded mesh for internal waste storage rooms, so that residents can see inside the storage room before entering it from the outside.

Waste collection service providers

From 25 January 2023, new MUD buildings of 10 or more units will not be eligible for Wellington City Council waste or recycling collection services.

Using Wellington City Council collection services

Applications can be made for developments of 10 or more MUDs to gain access to Council waste and recycling collection services up until 25 January 2023. The Council may provide kerbside collection for a MUD if:

- A MUD Waste Management and Minimisation Plan is approved by the Council for the development.
- There is sufficient space on the kerbside to temporarily place waste receptacles for collection.
- The temporary placement of waste receptacles on the kerbside will not limit access to or from the site.
- The temporary placement of waste receptacles on the kerbside will not obstruct pedestrians, street furniture, bus stops, bike lanes or other infrastructure.
- The temporary placement of waste receptacles on the kerbside will not encroach on adjoining properties.
- Kerbside collection is safe.
- Kerbside collection will not cause significant traffic disruption.
- The temporary placement of waste receptacles on the kerbside will not encroach on adjoining properties.
- The occupier and/or the manager of any premises is responsible for any waste generated on or from the premises until it has been collected.

When considering whether to opt for the provision of Council or private waste collection services, please note that no Council waste service provider will go onto or into a site to collect waste or recycling material. For this reason, consideration must be given to pedestrian access to enable residents to transfer waste and recycling receptacles onto the kerbside when designing a waste storage area.

Using private collection services

If a waste collection vehicle is required to drive onto a private road or property, or a waste collector is required to enter onto private property in order to service waste or recycling collection, then an appropriate private waste collection service will be required.

When planning for an on-site waste or recycling collection service, the following matters must be addressed:

- The relevant heavy vehicle standards should be incorporated into the development design of roads and access.
- Access for collection should allow the service vehicle to enter and leave the site without reversing.
- The access points and collection area should be free from obstacles and be an appropriate gradient.
- The clearance height should be free of any air conditioning ducts, sprinklers or other potential obstructions.
- Signs must be installed to ensure waste servicing loading zones, collection points, and turning circles are kept clear at appropriate times.

The application process

All completed MUD Waste Management and Minimisation Plan applications should be submitted to the Manager of Waste Operations, Wellington City Council.

Please ensure that all MUD waste planning and assessment considerations are addressed prior to submitting your application. Incomplete applications will be put on hold until any outstanding matters are adequately addressed.

The Council will endeavour to process any MUD Waste Management and Minimisation Plan application for a new development within 15 working days.

Need help?

Please email us at wasteoperations@wcc.govt.nz