

Waste Management Plan (WMP) Guidelines

This document may be used to assist in putting together a Waste Management Plan (WMP) for residential/ commercial/ mixed use development planning applications. It should be used in conjunction with Knox Procedure- Waste Management in Multi Unit Developments.

STEP 1: Estimate the volume of waste that the residential/ commercial premises will produce each week:

RESIDENTIAL

- Summarise the number of dwellings of each bedroom size
- Calculate the total volume of each waste stream from table 1 for four waste streams (rubbish, recycling, food/ garden and glass).

Table 1 –residential waste generation rates per week without food/ glass

Dwelling size	Rubbish	Recycling	Garden	
3 bedroom or greater	120L	120L	120L	-
1-2 bedroom	80L	120L	120L	-

Table 2 –residential waste generation rates per week with food/garden and glass

Dwelling size	Rubbish	Recycling	Food/ Garden	Glass
3 bedroom or greater	60L	120L	240L	30L
1-2 bedroom	40L	120L	240L	30L

Example calculation for Council residential waste collection service: for an 8 unit, two bedroom development including food/garden and glass, shared bins

Dwelling size	Rubbish	Recycling	Food/ Garden	Glass
x 3 bedroom or greaterx 40L = L x 120L =L x 240L =L x 30L =L
x1- 2 bedroom	8 x 40L = 320L	8 x 120L = 960L	8 x 240L = 1920L	8 x 30L = 240L
Total waste generated	320 Litres/week	960 Litres/week	1920 Litres/week	240 Litres/week

COMMERCIAL

- Determine type of commercial use
- Calculate the total floor area and number of days per week of operation
- Calculate the volume of organic waste the business will produce (if applicable):

Table 3: commercial waste generation rates if food/ garden waste is separated

(For businesses that sell food, around 20% of garbage is food/garden waste.)

Commercial Use Type	Rubbish	Food/ Garden	Recycling
Restaurant	528L/100 m ² floor area/day	132L/100 m ² floor area/day	200L/100 m ² floor area/day
Supermarkets	528L/100 m ² floor area/day	132L/100 m ² floor area/day	240L/100 m ² floor area/day
Café	240L/100 m ² floor area/day	60L/100 m ² floor area/day	200L/100 m ² floor area/day
Take-away / café (pre-packaged food only)	120L/100 m ² floor area/day	30L/100 m ² floor area/day	150L/100 m ² floor area/day

Table 4: commercial waste generation rates without separation of food/ garden

Commercial Use Type	Rubbish	Recycling
Retail (non-food)	50L/100 m ² floor area/day	50L/100 m ² floor area/day
Office	10L/100 m ² floor area/day	10L/100 m ² floor area/day
Restaurant	660L/100 m ² floor area/day	200L/100 m ² floor area/day
Supermarkets	660L/100 m ² floor area/day	240L/100 m ² floor area/day
Café	300L/100 m ² floor area/day	200L/100 m ² floor area/day
Take-away / café (pre-packaged food only)	150L/100 m ² floor area/day	150L/100 m ² floor area/day

More example waste generation rates can be found in Knox Procedure- Waste Management in Multi Unit Developments.

Example calculation for a 100m² café that has separate food/garden waste disposal.

Commercial Use	Rubbish	Food/ Garden (if separated)	Commingled Recycling
Type / rate (see Table 1) Cafe.....	240 L/100 m ² floor area/day	60 L/100 m ² floor area/day	200L/100 m ² floor area/day
Floor area ...100m ²	100 m ² /100 x 240L = 240 Litres/day	100 m ² /100 x 60L = 60 Litres/day	100 m ² /100 x 200L = 200 Litres/day
Days of operation per week 7	240 litres/day x 7 = 1,680 L/week	60 litres/day x 7 = 420 L/week	200 litres/day x 7 = 1400 L/week
Total waste generated per week (g)	1,680L	420L	1,400L

STEP 2: Determine the size and number of residential/ commercial bins.

- Both current and future waste services must be presented
- Maximum bin size for Council service is 240 litres.
- Maximum bin size for private services is 1,100 litres.

RESIDENTIAL

Example of bins for future residential waste service: for eight unit, two bedroom development, shared bins (Council service including food/garden and glass. Rubbish is fortnightly, food/garden is weekly).

RUBBISH				RECYCLING			
Frequency	Bin size	No Bins	Weekly Volume	Frequency	Bin size	No Bins	Weekly Volume
	1100L				1100L		
	660L				660L		
fortnightly	240L	3	360	fortnightly	240L	8	960
	120L				120L		
	80L						
TOTAL			360 Litres/week	TOTAL			960 Litres/week

FOOD/GARDEN				GLASS			
Frequency	Bin size	No Bins	Weekly Volume	Frequency	Bin size	No Bins	Weekly Volume
weekly	240L	8	1,920	four weekly	240L	4	240
	120L				120L		
TOTAL			1,9,20Litres/week	TOTAL			240 Litres/week

COMMERCIAL

Example of bins for the 100m² café that has separate food/ garden waste disposal, private service

RUBBISH				RECYCLING			
Frequency	Bin size	No Bins	Weekly Volume	Frequency	Bin size	No Bins	Weekly Volume
	1100L				1100L		
1 x weekly	660L	3	1,980	1 x weekly	660L	2	1320L
	360L				360L		
	240L			1 x weekly	240L	1	240L
	120L				120L		
TOTAL		1,980	Litres/week	TOTAL		1,560	Litres/week

FOOD/GARDEN				GLASS			
Frequency	Bin size	No Bins	Weekly Volume	Frequency	Bin size	No Bins	Weekly Volume
1x weekly	240L	2	480L	N/A	240L		
	120L				120L		
TOTAL		480	Litres/week	TOTAL			Litres/week

STEP 3: Decide where waste will be stored and collected from:

Bin storage:

- Bins must be stored within the property boundary and not seen from the street. Can be in garage or private open space for individual units or communal bin store.
- Bin storage areas must be big enough to fit all the bins listed in the plan, including future food/ garden and glass bins, as well as any other bin equipment (for example mechanical assistance)
- Communal bin storage areas must be screened on all sides and gated.
- There must be enough space to access and move bins.
- Bins must be stored on site between collections.
- Bin store can be interim to assist with collection. Bins placed day before collection and retrieved on day of collection.
- Mechanical assistance will be required if there is a slope between the bin storage area and the waste truck or the bins need to be walked a long distance to the truck.
- Refer Knox Procedure- Waste Management in Multi Unit Developments for maximum distances for residents to access storage and collection points.

Collection location:

- Bins must be able to be placed at the kerbside for Council collection if the Council waste vehicle cannot enter and leave or collect within the development without reversing.
- Bins cannot be placed kerbside for a private collection.
- Private waste vehicles can access the site provided they are not required to reverse to enter, leave. Vehicles may perform turning within the development..
- Private waste vehicle can park on street at the front of the development (subject to any restrictions) and driver walk bins from bin store to waste vehicle.

STEP 4: Prepare plan drawings to show the following:

- Bin storage and collection area: individual bins must be shown drawn to scale.
 - show how future bins will be accommodated
- Bin collection and transfer pathway – the route used by residents to transfer waste to the bins, and the transfer route of the bins to the collection point.
- Waste vehicle diagrams:
 - Show waste truck parking location if on a main street
 - Provide swept path diagrams showing waste truck entering and exiting, if pulling up in street or within property boundary

Example plan drawing of a small residential development, showing bin storage and kerbside collection

