



Low Impact Development  
Consulting

# Waste Management Plan & Operations Guide

Mixed Use Development

272 Maroondah Hwy Healesville

**Prepared for:** Maeren Blue Investments Pty Ltd

**Prepared by:** MC – Low Impact Development Consulting

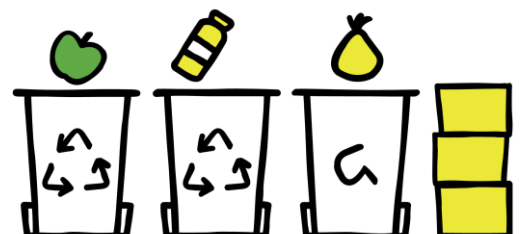
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The content of this document represents the entirety of work output or recommendations offered by LID Consulting for this particular project. This content supersedes all other verbal discussions undertaken by LID Consulting representatives in relation to this project.

Commercial waste calculations are based on rates provided by government organisations and adopted and used as an industry standard. Bin numbers and spatial requirements have been calculated in accordance with these guidelines. The end user requirements may vary from this depending on the business use, type and operational practice.

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 LID acknowledges and pays respect to the Australian Aboriginal and Torres Strait Islander people, to their ancestors and elders, past, present and emerging, as the traditional custodians of the lands upon which we work and live. We recognise Aboriginal and Torres Strait Islander people's deep cultural and spiritual relationships to the water, land and sea, and their rich contribution to society.

# 1 Waste Summary

## 1.1 Proposed Development

<b>Address:</b>	272 Maroondah Hwy Healesville
<b>Type:</b>	Mixed use development
<b>Dwellings:</b>	3 Apartments
<b>Break up of units:</b>	3 x 2 bedroom
<b>Commercial Shop:</b>	95.2m <sup>2</sup>
<b>Commercial Bar:</b>	53.2m <sup>2</sup>

The proposed 3-storey development comprises of 3 residential units, a commercial bar and shop space open 6 days a week. The shop usage is yet to be determined.

The main vehicular access points are from Maroondah Hwy and a rear laneway that connects with Symons Street and Green Street. A shared bin store has been located within the south side of the building with access to the carpark.

Space for the collection, separation and storage of waste and recyclables has been provided, including opportunities for on-site management of glass and food waste as appropriate.

## 1.2 Waste Collection Summary

### 1.2.1 Residential

A council collection service is proposed to collect the following shared residential bins at the indicated frequency. Residents will be responsible for transferring bins to the nature strip for collection.

<b>Residential waste</b>	<b>Council Collection Service – collection from Symons St</b>	
<b>Waste streams</b>	<b>No. of bins and capacity</b>	<b>Collection frequency</b>
Co-mingled Recycling	3 x 240L	Once fortnightly
FOGO (Food Organics Garden Organics)	Not currently required (future provision) 3 x 120L bins*	-
Glass	Not currently required (future provision) 3 x 120L bins*	-
Landfill	3 x 120L	Once weekly
Green Garden waste	-	-
Hardwaste	Stored within each tenement	1 x 3m <sup>2</sup> annual Council kerbside collection
E-waste	To be excluded from landfill waste.  To be deposited by residents at approved e-waste disposal sites.	As often as required.

Other waste streams	Optional but recommended that a space be allowed for or a stack of tubs to allow separate storage of these other waste streams.	When tub is full – Owner's Corporation is to arrange items to be collected or set to recycling facility.
<ul style="list-style-type: none"> <li>Batteries</li> <li>Light globes</li> <li>Soft plastics</li> <li>Printer cartridges</li> </ul>		

## 1.2.2 Commercial

As the front shop usage is currently unknown, two commercial waste streaming proposals have been provided.

### Proposal 1

*Example of a commercial bar and a non-food store in the shop space*

A Council commercial collection service is proposed to collect the following bins at the indicated frequency. The bins will be collected from the kerbside.

Commercial Waste	Council Collection Service – collection from Maroondah Hwy	
Waste streams	No. of bins and capacity	Collection frequency
Co-mingled Recycling	4 x 240L	Fortnightly
Cardboard and paper	-	-
Glass	*Not currently available (future provision)	-
Organic Food Waste	*Not currently available (future provision)	-
Landfill	2 x 120L	Twice Weekly
Green Garden waste	N/A	N/A
Hardwaste	To be stored within the commercial space	Private waste collection as often as required
E-waste		As above in hard waste
Other waste streams	Optional but recommended that a space be allowed for a stack of tubs to allow separate storage of these other waste streams.	When bin/tub is full –building management is to arrange items to be collected or set to recycling facility.
<ul style="list-style-type: none"> <li>Batteries</li> <li>Light globes</li> <li>Soft plastics</li> <li>Printer cartridges</li> </ul>		

## Proposal 2

Example of a commercial bar and a café in the shop space

A private collection service is proposed to collect the following bins at the indicated frequency. Private waste collectors will be responsible for collecting bins from within the bin store area and transferring to the temporary collection point.

Commercial Waste	Private Collection Service – collection from laneway	
Waste streams	No. of bins and capacity	Collection frequency
Co-mingled Recycling	1 x 660L	Twice weekly
Glass	*Future provision	-
FOGO	1 x 240L	Three times a week
Landfill	1 x 660L	Twice weekly
Hardwaste	To be stored within the commercial space	Private waste collection as often as required
E-waste		As above in hard waste
Other waste streams		
<ul style="list-style-type: none"><li>Batteries</li><li>Light globes</li><li>Soft plastics</li><li>Printer cartridges</li></ul>	Optional but recommended that a space be allowed for a stack of tubs to allow separate storage of these other waste streams.	When tub is full –building management is to arrange items to be collected or set to recycling facility.

\* While currently not required a 4 bin system will be in place in the future as discussed in [Section 2.1](#). Each tenement has space available to store 4 bins.

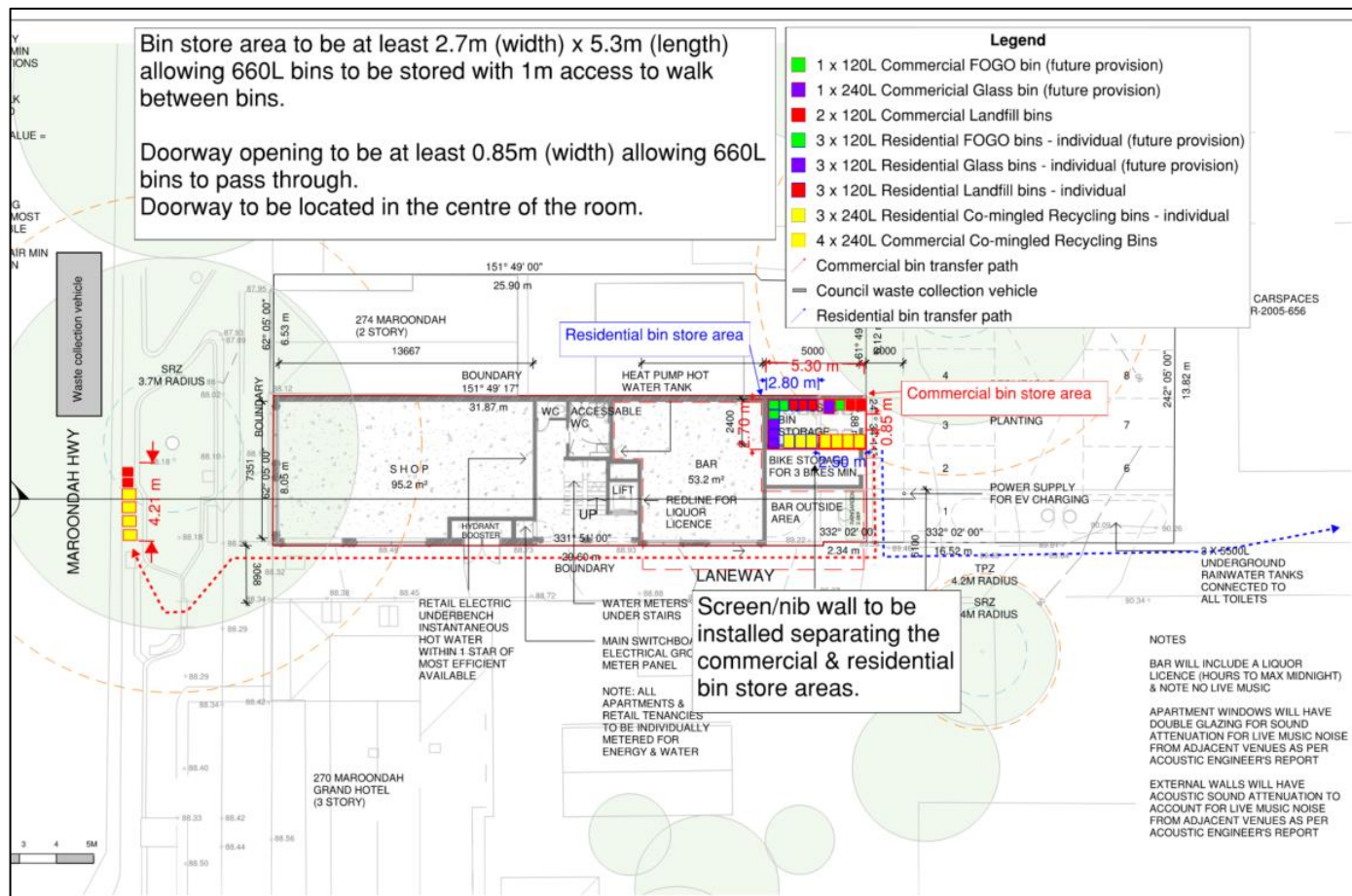
The approved Waste Management Plan (WMP) will be the model to be adopted for this development. Detailed design and as-built installation must incorporate the design proposed and approved under this WMP. Any revisions of the WMP or changes to the approved waste system of the development may require Council approval and may require a re-submitted Waste Management Plan. More detail is contained within this report.

### 1.3 Bin Store(s) & Collection Plan

Proposal 1 and 2 of the Bin Store area and collection plan showing two waste streaming arrangements that accommodate if the shop usage is a non-food store or a café. Both provide adequate space for occupant accessibility and collection.

**Proposal 1** – Residential, Commercial bar and non-food shop collection.

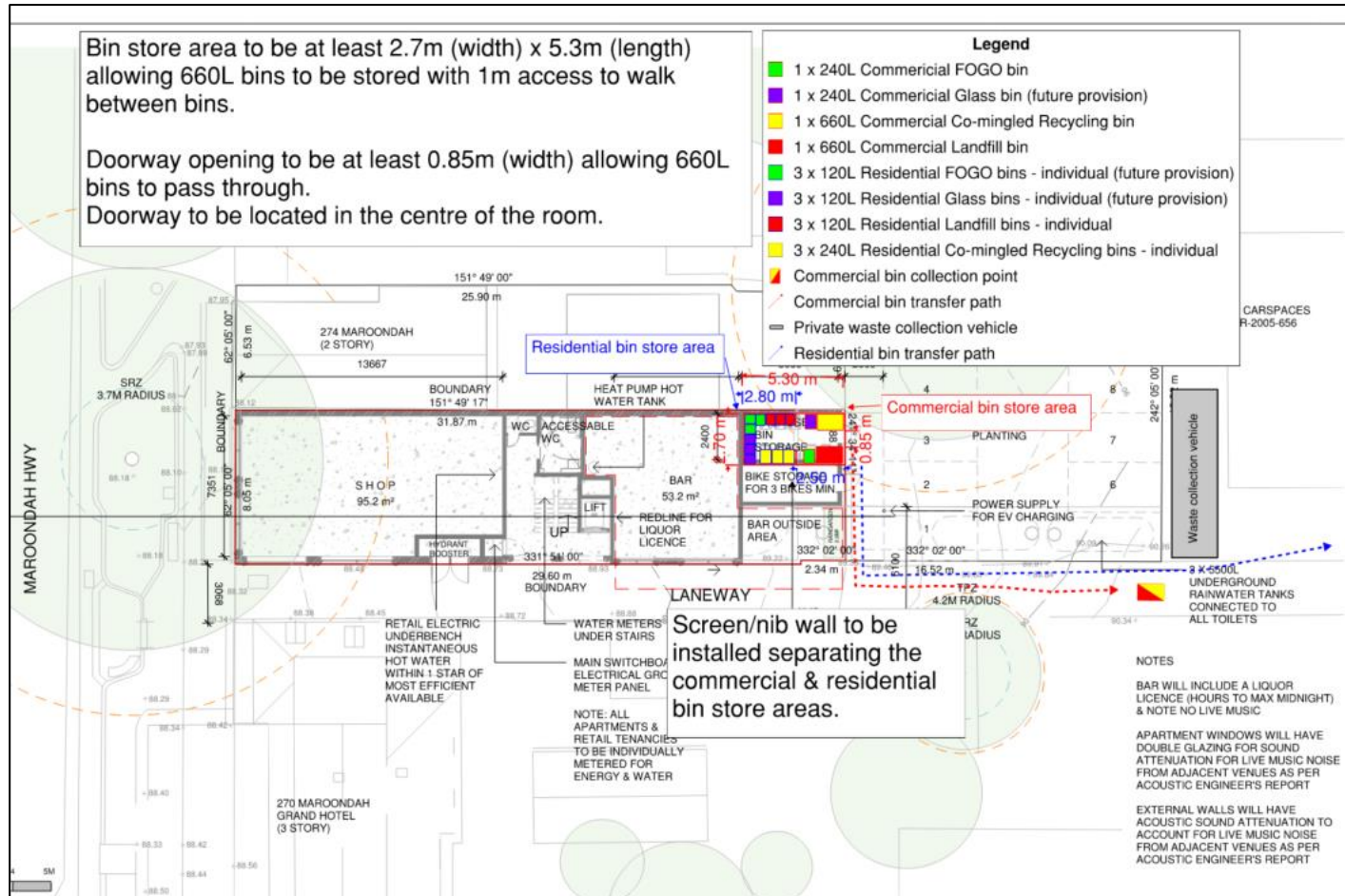
Council domestic kerbside collection on Symons Street. Council commercial kerbside collection on Maroondah Hwy.





**Proposal 2 – Residential, Commercial bar and café collection.**

Council domestic kerbside collection on Symons Street. Private commercial collection from the laneway. Private waste operators will be responsible for collecting, emptying and returning bins to the bin store area.



## 2 Waste Management Plan

Low Impact Development (LID) Consulting was engaged by Maeren Blue Investments Pty Ltd to assess the proposed development at 272 Maroondah Hwy Healesville to provide a Waste Management Plan (as required by Statutory Planning).

A waste management analysis has been undertaken based on the following documents:

- Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments 2018;
- Yarra Ranges Shire Council's planning scheme clauses 15.02-1S and 55.07-11 & 58.06-3 addressing Standard B33; and
- Yarra Ranges Shire Council Waste and Recycling Guide: a guide to correct use of waste collection services in Yarra Ranges

This report is based on the drawing sets:

- Planning Appln 2/2/2022, dated February 2022 prepared by soft loud house architects

### 2.1 Future 4-bin System

Victoria will implement a 4-bin colour coded waste and recycling system in all residential settings by 2027. As the 79 different councils work towards this, some will roll out this scheme sooner than others. Generally, all new developments will look to incorporate space for these waste streams now in the planning phase. **Non-residential developments are also to implement these waste streams to ensure as much waste to landfill is diverted into recycling streams.**

Municipalities will have different percentages of glass and food volumes within each general waste and recycling streams. Bin numbers may need to be adjusted during the first 6-12 months of occupation to ensure appropriate streaming can occur.

In the meantime, if separate glass collections are not possible, these bins may be temporarily swapped for co-mingled recycling bins. More information can be found at

<https://www.vic.gov.au/four-bin-waste-and-recycling-system>



### 2.2 Council Considerations

The following issues / constraints were key considerations in preparing this waste collection strategy:

- Utilizing the Council domestic collection is the preferred option for future residents as the cost is included in the council rates.
- Council commercial collection service can provide multiple general waste bins sized 120L and recycling bins sized 240L. Utilizing the Council commercial collection service is

not possible for a café/restaurant in this instance due to the large volume of bins that would be required.

- c) Council commercial collection service does not provide a hard waste service
- d) Council uses an automated mechanical side arm service ie requires 300mm between bins.

## 2.3 Standard Residential Collection Options

City of Yarra Ranges standard residential Bin Collection Options:

- 240L co-mingled recycling bins collected fortnightly;
- 120L landfill bins collected weekly;
- 120L or 240L green waste bins fortnightly;
- 3m<sup>2</sup> hardwaste collected once yearly (on nature strip) including e-Waste
- Bi-annual bundled branch collection

Council will collect these allowances from all rateable properties, but will not collect above these volumes if the site generates higher levels of waste or non-approved waste types.

## 2.4 Proposed Residential Waste Solution

- Site Layout:** Refer Bin Store & Collection Plan – [Section 1.3](#).
- Waste Streaming:** Within each unit – include 5-7Lt food waste caddy as well as recycling, glass & landfill bins – Refer [Section 3.8](#) below.
- Collection Type:** Council kerbside collection service to collect all waste streams.
- Collection Location:** From the kerbside in Symons St.
- Bin Store Location:** Communal bin store area. Refer Bin Store & Collection Plan - [Section 1.3](#).
- Base Landfill generation rate:** 120L per unit per week (future divert 30% to dedicated food organics collections)
- Base Recycling generation rate:** 120L per unit per week (future divert 20% to dedicated glass collections)

Residential	Yarra Ranges Council Waste generation rates			Proposed Apartment Solution		
	No. units	Allowances	Total estimated waste volume	No. of Bins	Bin Size	Collection Frequency
Co-mingled Recycling	3	240L per dwelling per fortnight	720L of recycling per fortnight	3	240L	Fortnightly
FOGO / Garden waste		*Future provision	Approx. 108L of food & garden organics per week	3	120L	Yet to be determined

<b>Future Glass<sup>1</sup></b>		*Future provision	Approx. 144L of glass per fortnight	3	120L	Yet to be determined
<b>Landfill Waste</b>		120L per dwelling per week	360L to landfill per week	3	120L	Once weekly
<b>Hard Waste</b>		Stored individually in each apartment  See <b>Section 2.9</b> & <b>Appendix 4</b> for Bulky Hardwaste Collections & Recycling.				1 x 3m <sup>3</sup> annual kerbside collection
<b>E-waste</b>		See <b>Section 2.10</b> & <b>Appendix 4</b> for E-Waste Collections & Recycling.				As often as required
<b>Other items</b>		A stack or tubs for: <ul style="list-style-type: none"> <li>Batteries</li> <li>light bulbs</li> <li>soft plastics</li> <li>printer cartridges</li> <li>other recyclable item</li> </ul> See <b>Section 3.8</b> & <b>Appendix 4</b> for more information.		4	tubs	As often as required to maintain bins

## 2.5 Proposed Commercial Waste Solution

### Tenancy/space

Shop 1	95.2 m <sup>2</sup>
Bar	53.2 m <sup>2</sup>

### Area

### Site Layout:

Refer Bin Store & Collection Plan - **Section 1.3**.

### Bin Store Location:

Refer Bin Store & Collection Plan - **Section 1.3**.

### Base Rates:

Refer SV Waste Management and Recycling in Multi-unit Developments: Better Practice Guide

*Proposal 1 - Commercial bar and non-food store example*

**Collection Type:** Council Commercial collection service to collect all waste streams.

**Collection Location:** From the kerbside on the Maroondah Hwy

Commercial	Council commercial collection service		Proposed solution		
	Allowances	Total estimated waste volume	No. of Bins	Bin Size	Collection Frequency

<sup>1</sup> The Age (2019), <https://www.theage.com.au/national/victoria/victorians-to-get-cash-for-bottles-scheme-20200224-p543ms.htm>

<b>Co-mingled Recycling</b>	<b>Refer Appendix 2 - Waste rates &amp; Calculation</b>	900L of recycling per fortnight	4	240L	Fortnightly
<b>Organic Food Waste</b>		*Future provision			
<b>Glass</b>		*Future provision			
<b>Landfill</b>		450L of landfill per week	2	120L	Twice weekly
<b>Green Garden Waste</b>					Private contractor to maintain communal garden areas
<b>Hard Waste</b>	Bulky waste stored in each commercial space  See <b>Section 2.9</b> & <b>Appendix 4</b> for Bulky Hardwaste Collections & Recycling.				Private waste collection service as often as required.
<b>E-waste</b>	See <b>Section 2.10</b> & <b>Appendix 4</b> for E-Waste Collections & Recycling.				As per Hard Waste
<b>Other items</b>	1 tub per waste stream or a stack of tubs for: <ul style="list-style-type: none"> <li>Batteries</li> <li>light bulbs</li> <li>soft plastics</li> <li>printer cartridges</li> <li>other recyclable item</li> </ul> See <b>Section 3.8</b> & <b>Appendix 4</b> for more information.	4	tubs		As often as required to maintain tubs

Proposal 2 - Commercial bar and a café example

**Collection Type:** Private collection service to collect all waste streams.

**Collection Location:** From the laneway at the rear of the property

Commercial	Private collection service		Proposed solution		
	Allowances	Total estimated waste volume	No. of Bins	Bin Size	Collection Frequency
<b>Co-mingled Recycling</b>	<b>Refer Appendix 2 - Waste rates &amp; Calculation</b>	1308L of recycling per week	1	660L	Twice weekly
<b>Organic Food Waste</b>		621L of FOGO per week	1	240L	Three times weekly
<b>Glass</b>		*Future provision			
<b>Landfill</b>		1240L to landfill per week	1	660L	Twice weekly

<b>Green Garden Waste</b>				Private contractor to maintain communal garden areas
<b>Hard Waste</b>	Bulky waste stored in each commercial space  See <b>Section 2.9</b> & <b>Appendix 4</b> for Bulky Hardwaste Collections & Recycling.			Private waste collection service as often as required.
<b>E-waste</b>	See <b>Section 2.10</b> & <b>Appendix 4</b> for E-Waste Collections & Recycling.			As per Hard Waste
<b>Other items</b>	1 stack of tubs for: <ul style="list-style-type: none"> <li>• Batteries</li> <li>• light bulbs</li> <li>• soft plastics</li> <li>• printer cartridges</li> <li>• other recyclable item</li> </ul> See <b>Section 3.8</b> & <b>Appendix 4</b> for more information.	4	tubs	As often as required to maintain space

NOTE: Streaming of waste into dedicated bins is encouraged where possible. The type of recycling bins nominated above may be swapped to suit the type of recyclable commercial waste generated (while not altering the number of bins overall). Possible additional separate waste streams include:

- hard plastics
- soft plastics
- cardboard / paper (especially for retail and office tenancies)

## 2.6 Food Waste Collections

The Better Practice Guidelines<sup>2</sup> stipulates diverting food from landfill waste. This can be achieved in a number of ways – refer **Section 2.6** & **Appendix 4** below.

**Commercial collection of dedicated food waste** is provided by a number of private waste collection contractors for larger multi-unit, mixed-use and commercial developments. **An organics food collection service is recommended for this type of development if the tenant is a café/restaurant.**

- a) Food waste collections should occur a minimum 2-3 times per week (depending on the temperature of the bins) to avoid a build-up of odour and unwanted mess.
- b) Consideration should also be given to end of trip / processing of this waste by the engaged waste contractor to ensure this waste stream is appropriately treated and does not end up in landfill.
- c) Some current contractors using smaller waste collection vehicles that also collect organics include:

<sup>2</sup> Better Practice Guide for Waste Management and Recycling in Multi-unit Developments (Sustainability Victoria, 2019)



- Easywaste – using 120 & 240L bins <http://www.easywaste.com.au>
  - Waste Ninja – 120 & 240L bins <https://www.wasteninja.com.au>
  - Waste Wise Environmental [www.wastewise.com.au](http://www.wastewise.com.au)
  - Speedie Waste <http://www.speediewaste.com.au/index.php>
- d) Other current contractors that also collect organics include:
- Sita – 1.5m<sup>3</sup>, 3m<sup>3</sup> & 4.5m<sup>3</sup> bin options (via Cleanaway) <http://www.sita.com.au/commercial-solutions/resource-recovery-recycling/organic-material/>
  - KS Environmental – 120L bins (inner metro only) <https://ksenvironmental.com.au/services/recycling-services/food-organics/>
  - Veolia – using 1.5m<sup>3</sup> bins only (front lift) <https://www.veolia.com/anz/our-services/our-services/recycling-waste-services/recycling-organics>

## 2.7 Glass Collections

Space for additional glass bins is to be provided in all residential and commercial developments in line with Victoria's future 4-bin system. Each council will review the frequency of residential collections, most likely monthly.

## 2.8 Green Garden Waste

Green garden waste does not apply to this development as there is no garden area.

- a) For common areas a private maintenance contractor will be responsible for removing any green garden waste and can also be arranged

## 2.9 Bulky Hard Waste Collection

In the first instance, unwanted bulky items, clothes and other consumables should be donated to charities, sold on online or at second-hand market places if in good condition. If repairs are required, seek out repair community centres for re-purposing – Refer **Appendix 4** for more details.

- a) Yarra Ranges Shire Council provides one residential kerbside hard rubbish collections per household a year of 3 cubic meters.
- b) Domestic hard rubbish items will be required to be stored within each apartment prior to transferring to the nature strip
- c) Hardwaste items can also be taken directly to privately operated transfer stations.
- d) Local information regarding the disposal and recycling of common household items for each Council can be found at:
  - <https://www.sustainability.vic.gov.au/You-and-your-home/Waste-and-recycling/Council-waste-and-recycling-services>
  - [www.recyclingnearyou.com.au](http://www.recyclingnearyou.com.au)
- e) Yarra Ranges Shire Council does not provide a commercial hard rubbish service. A private waste contractor can be engaged to collect all bulky hard waste and eWaste items as required.

## 2.10 E-Waste Recycling

- a) As of 1st July, there is a ban on e-waste sent to landfill in Victoria. Any item with a plug, battery or cord can no longer be placed in kerbside bins and instead must be deposited at a designated e-waste drop-off point. Electronic waste includes old mobile phones, computers, audio devices, refrigerators and other white goods, hair dryers, TVs, heaters, and air-conditioners.
- b) Yarra Ranges Council provides e-Waste collections as part of the annual residential kerbside hard rubbish collections. These items are to be placed separately to aid collection.
- c) Between collections, authorised electrical waste disposal locations can be found:
  - o Privately operated transfer stations
  - o Officeworks collects e-waste



- o <https://recyclingnearyou.com.au/electrical>
- o <https://www.sustainability.vic.gov.au/Campaigns/eWaste/Where-do-I-take-ewaste>
- o <https://www.mobilemuster.com.au>

## 3 Waste Management Details

### 3.1 Waste Streaming & Contamination

Managing waste contamination requires the correct separation of products that are recycled differently. This is called waste streaming. Correct streaming requires consideration by stakeholders that generate, dispose of or manage waste.

Good waste streaming reduces contamination to ensure more effective recycling. Refer **Appendix 4** for Better Practice Waste Management links.

### 3.2 Management Responsibilities

The Owner's Corporation is responsible for all aspects of waste management including implementing adequate safe operating procedures. Items to be addressed by the Owner's Corporation include:

- a) Requesting a copy of the endorsed Waste Management Plan from Council if they do not have it or the developer has failed to provide the WMP to them.



- b) Ensuring minimal contamination occurs between waste streams to maximise recycling. This is to be achieved by:
  - o Providing separate bins for each waste stream (including recycling, glass, food organics & landfill) in all units and work areas for staff and residents to appropriately stream waste. See **Section 3.8**
  - o Routine inspection of bins in shared bin stores to ensure their appropriate use.
  - o Undertaking a waste audit should it be suspected waste is not being placed in the correct bins.
  - o Providing feedback to occupants / staff if the system is not working properly.
  - o Providing information to occupants / staff with guides of how to use the various bin systems e.g. boxes to be flattened, containers for recycling washed, bins to not be over-full. See **Section 3.9** for further information about Signage, Education & Safety.
- c) Ensuring all occupants / staff are aware of their responsibility with regard to waste & bin management.
- d) The Owner's Corporation is responsible in providing access for the private waste contractor (where applicable) to enter the site and commercial bin store area on the day(s) of collection.
- e) Allocation of responsibility to the contractor to retrieve commercial bins directly from the bin store area and return emptied bins at the time of collection. Responsibility should include ensuring the contractor collects any waste that spills from the bins during emptying.
- f) Cleaners & staff are responsible for placing waste in the appropriate colour coded bins in provided in work areas and then transferring them to corresponding bin in the bulk bin store to ensure all waste types are collected and recycled where possible.
- g) That bins and bins store areas are monitored regularly with regular cleaning of the bins and bin store spaces and clean-up after collection if necessary.
- h) Managing communal composting areas (if applicable).

### 3.3 Individual Occupants Responsibilities

The tenants / occupants / staff are responsible for their own waste. Items to be addressed in maintaining the system include:

- a) Apartment residents are responsible for placing bins in the designated collection location before the allocated collection day/time. Bins are to be returned on the same day collections occur.
- b) Individual occupants are responsible for placing their waste in the appropriate colour coded bins. This is to ensure all waste types are collected and recycled where possible and contamination of waste streams is minimised.
- c) That bins and bins store areas are monitored regularly with regular cleaning of the bins and bin store spaces and clean-up after collection if necessary.
- d) Management and coordination with council for bulky hard waste, eWaste and other waste collections.
- e) **Ensuring landfill placed in plastic bags** before placement into bins
- f) **Ensuring recycling materials are not bagged** and are to be placed loosely into the recycling bins. (Items in plastic bags in recycling bins are not recycled). Recyclable items in bin collections include:

- o Rigid plastic containers
- o Paper, cardboard
- o Glass bottles and jars
- o Steel cans, aluminium cans and aluminium foil are among items that can be recycled.

But exclude:

- o Soft plastic bags

**g) To improve recycling:**

- o Empty containers and bottles of any leftover food or liquid. Ideally rinse them out.
- o Don't put anything inside plastic bottles or containers
- o Paper – if it can't be ripped, it can't be recycled due to the plastic coating.
- o Check local waste collection / contractor requirements – some recycle all plastic resin codes, some are more restricted. Some want lids on bottles, some want them separate and in landfill.

### 3.4 What Goes in Each Bin

This information can be found at:

<https://www.yarraranges.vic.gov.au/Environment/Waste/What-you-can-put-in-your-bins>

### 3.5 Occupational Health & Safety

**A preliminary OHS risk assessment** has been included to identify potential OHS issues, however this risk assessment does not replace the need for the Management and collection contractors to complete their own OHS assessment for the bin collection process. See **Appendix 1** for further detail.

### 3.6 Bin Store Area Design

The Bin store area design/location must include the following:

- a) Floor and wall surfaces are to be appropriately durable and easily cleaned.
- b) Doors located in the allocated storage areas should be designed for easy access of larger bins sizes.
- c) Space suitable for bin wash down is to be available in the development. If this is the bin store then the floor is to be graded to a waste outlet with a litter trap. Alternately, a private contractor can be arranged to swap dirty bins for clean ones on a regular basis.
- d) If a bin wash is installed, a water tap and hose installed in or near the bin wash areas and correct drainage to sewer (never direct waste to storm water drains) should be designed in accordance with the relevant EPA Bunding Guidelines. Drains to the sewer to be located undercover to prevent rainwater infiltration.
- e) Bin stores or bins should be vermin proof - particularly where food waste is included. Ensure bin lids are closed and the bin store is an enclosed space and considered to be largely vermin proof.
- f) A waterproof power point in or near the bin store.
- g) Adequate mechanical or natural ventilation if not outdoors.

- h) Ensure adequate lighting is provided in accordance with National Construction Code (NCC) guidelines if to be accessed after hours.
- i) Meter boxes should not be included in bin store areas.
- j) Screen or nib wall to be installed between the commercial and residential waste bins to separate the bin storage area
- k) Bin store area to measure internally at least 2.7m (width) and 5.3m (length) based on current design to accommodate waste streaming bins.

### 3.7 Bin Store Area Access

A layout that allows access to all the bins with adequate size to allow easy movement/transfer of the required number of bins.

- a) Manoeuvrability within the bin store area with 1m to walk between bins.
- b) There is to be no significant step at any threshold between the bin store area and the point of collection.

### 3.8 Bin Types & Bin Sizes

#### 3.8.1 Mobile Wheelie Bins (MGBs)

The following sizes are indicative bin sizes based on the Sustainability Victoria Better Practice Guide specified sizes (Appendix 9). These sizes are the size allowances required by most Councils in bin store areas. Allow 100mm between 4 wheel bins and 50mm between 2 wheel bins for movement.



Size	Width	Depth	Height	Footprint
80L	450mm	530mm	870mm	0.24m <sup>2</sup>
120L	485mm	560mm	940mm	0.27m <sup>2</sup>
240L	580mm	735mm	1080mm	0.43m <sup>2</sup>
360L	600mm	885mm	1100mm	0.53m <sup>2</sup>
660L	1370mm	850mm	1250mm	1.16m <sup>2</sup>



Standard bin colours (refer AS4123.7)	
Landfill	Red
Co-mingled recycling	Yellow
Green organics	Light Green
Glass	Purple

\* NOTE: size may vary between Councils and contract suppliers

Alternative bin sizes - Different bin suppliers provide different size bins, although these should only be used exceptional cases and may cause issues with Councils.

	Best Practice Guide – Vic – mm D x W x H	Sulo bins	Waste Wise bins	Sita bins
80L bins	530D x 450W x 870H	505D x 455W x 835H	-	-

120L bins	580D x 485W x 940H	545D x 480W x 930H	561D x 481W x 920H	-
240L bins	735D x 580W x 1080H	730D x 585W x 1060H	740D x 582W x 1072H	-
360L bins	885D x 600W x 1100H	900D x 600W x	-	-
660L bins	850D x 1370W x 1250H	850D x 1400W x approx 1300H	775D x 1216W x 1227H	765D x 1360W x 1235H
1100L bins	1245D x 1370W x 1470H	1070D x 1240W 1330H	1088D x 1196W x 1310H	1070D x 1360W x 1485H

### 3.8.2 Internal Bins – Residential

In multi-unit developments streamlined waste bins are to be included in each dwelling (perhaps under the kitchen sink). Bin types are to include Co-mingled Recycling, Organic Food Waste, Glass and Landfill (general) waste.

Where food and garden organic waste can be composted onsite, Bokashi Bins or Urban Composters used in the kitchen can speed up this process. Residents should check with their local council as to any discounts available for garden composting units and worm farms. See **Appendix 4** for more details.



*Kitchen Caddy – supplied by council where food scraps can be placed in FOGO bins.*



*Pull-out kitchen bins to be supplied in each unit for better waste separation. This encourages better recycling practices.*



*Apartment Bokashi / Urban Composter bins where food scraps can be placed in on site compost.*



*Examples of a stack of tubs for small recyclable waste streams such as batteries, light globes and printer cartridges.*

### 3.8.3 Internal Bins – Commercial

Correct streaming in commercial developments requires consideration by staff, cleaners and visitors. It needs to be clear for all users as to where and how they dispose of their waste.

- a) Correct streaming in these areas in the first instance reduces contamination to ensure more effective recycling occurs.
- b) Separation of landfill and recyclables is to initially occur in all work areas, communal spaces and kitchenettes and then in bin stores. For this reason, the development will include streamed waste bins in each kitchen and work area. Cleaners and/or staff would then transfer already streamed waste to the corresponding bin in the main storage area.
- c) Commercial waste is to be transferred to the shared bulk bin store with minimal manual handling.



*Examples of streamed commercial waste bins. Larger sizes may be required to suit development*

**All bins are to be placed alongside each other to ensure recycling is easy.**

- d) Outdoor areas where people congregate, where possible should be smoke free zones. Locations where smokers congregate should include an ash box installed on the litter bins or a wall. This will help reduce cigarette butts being left on the ground and entering the stormwater system and creeks.



*Example of cigarette ash bin*

## 3.9 Signage, Education & Safety

It will be the responsibility of the Owner's Corporation to ensure all apartment residents and shop/bar staff have all the material available to them and that they adhere to the required practices regarding waste management, sustainability and promoting waste minimisation.

- a) All education material will be in accordance with Council requirement or if this is not available, per signage on the following website:

<https://www.sustainability.vic.gov.au/recycling-and-reducing-waste/waste-systems-in-residential-commercial-and-industrial-buildings/waste-signage>

- b) Directional signage should be installed to direct bin collectors to the bin storage areas.
- c) Instructional signage within shared communal bin stores is to indicate which bin is for landfill and which is for recyclables or other waste streams.



*Simple, brightly coloured signs to quickly communicate what items are acceptable for each bin.*

- e) A sign will be placed on the landfill bin that soft plastics can be recycled at any location identified on the Redcycle website <http://www.redcycle.net.au/where-to-recycle/>



*A quick guide to some most commonly recycled Soft Plastic items*

### 3.10 Waste Vehicle Requirements

- a) Maroondah Hwy and Symons Street are typical roads, and no vehicle size limitation should apply. Council will confirm if MRV or HRV vehicles are used for this site.
- b) If a private waste contractor is required, A 8.8m MRV waste vehicle or 6.4m rear mini loader is to enter the laneway from Symons Street and travel towards the site. The vehicle will manoeuvre to exit the laneway and continue via Green Street (**See Appendix 3**).
- c) The private waste contractor will be responsible for retrieving, emptying and returning bins to/from the bin store at the time of collection.
- d) The Owner’s Corporation is responsible for ensuring the waste contractor has access to the bin store area on the days of collection. If there is a security code or key required for access, the contractor should be provided with these so they may access the bin store on the specified collection days.



Vehicle	Typical size
Rear mini loader	6.4m long x 2.35m wide truck (basement collections) – 2.2m head clearance (Small Rigid Vehicles)
Rear Loading	8.8m – 10m long x 2.6m wide truck – 4.0m head clearance (Medium Rigid Vehicles)
Side loading automated arm	Sizes vary from MRV to HRV
Front Fork Loading automated arm	10.4m – 12m long x 2.6m wide – 5.5m head clearance (Heavy Rigid Vehicles)
Rear Hook Loading (compactors)	9.7m long x 2.6m wide – 5.5m head clearance

NOTE: Larger vehicles may need to be assessed for clearances prior to entering the site.

### 3.11 Traffic Management

- Traffic management along Maroondah Hwy and Symons Street should not be an issue. Waste bins are routinely collected by Council from the kerbside/nature strip early in the morning.
- Traffic management along the laneway should not be an issue with the quick emptying times with waste from only 1 bin will be collected at any one time.

### 3.12 Collection Times

**Collection times: Domestic waste** – bin collection shall be in accordance with Council and EPA Noise Control Guidelines Publication 1254, which state:

- Collections occurring once a week are to be restricted to the hours 6 am — 6 pm Monday to Saturday
- Collections occurring more than once a week are to be restricted to the hours 7 am — 6 pm Monday to Saturday

**Collection times: Commercial waste** – bin collection shall be in accordance with Council and EPA Noise Control Guidelines Publication 1254, which state:

- Collections occurring once a week are to be restricted to the hours 6:30 am — 8 pm Monday to Saturday, or 9am – 8am Sundays and public holidays.
- Collections occurring more than once a week are to be restricted to the hours 7 am — 8 pm Monday to Saturday, and 9am – 8am Sunday and public holidays.

### 3.13 Noise management

Minimizing noise associated with waste movement and collections include:

- Collections occurring during the stipulated collection times restrict the hours of noise from collections.
- Collection vehicles should not break up bottles at the point of collection, only once off site. Compaction of waste should only be carried out whilst waste vehicles are on the move and off-site.

### 3.14 Response to Increasing Waste

- a) The total waste capacity exceeds the required allowance calculation by rounding up to the nearest bin size so there is built in capacity should waste levels increase beyond estimates.
- b) A waste audit can be undertaken to understand the content of the waste bins. Audits provide feedback to clients of good or poor recycling practices. Images can be helpful to convey feedback.
- c) If landfill bins consistently overflow, then apartment residents and bar/shop staff are to be directed to educational material as to the appropriate streaming of waste including food and other recyclables. (see **Section 4** and
- d) **Hard plastic** containers not collected in comingled recycling coded 1-7 (excluding polystyrene) can generally be recycled. This should be checked with each council or private collection contractor. ie toys, tubs etc
- e) Soft Plastic Recycling below).
- f) If recycling bins continue to overflow, residents and bar/shop staff should be reminded to crush and flatten all cardboard boxes before placing these in the recycling bin(s). It may also be appropriate to obtain an additional recycling bin.
- g) The bin store area has spare space to accommodate additional or larger bins if required.
- h) The last choice option is for more regular commercial collections to occur.

### 3.15 Reducing Odour

Odour from waste primarily emanates from bin store areas. Control of odour must occur in the bin store area with the provision of suitable natural or mechanical ventilation. If installed the mechanical ventilation system for the bin storage area must not cause a public health nuisance (noise and odour generation) and comply with EPA requirements and in accordance with the ventilation requirements of the Building Code of Australia and AS 1668.2.

- a) The bin store area and bins are to be monitored and cleaned on a regular basis to remove sources of smells.

### 3.16 Litter Spread

- a) Litter spread is to be managed by ensuring bins are not overloaded, and lids are always closed.
- b) The Owner's Corporation will be responsible for cleaning up any waste that spills from the Council collection service
- c) The private collection contractor's agreement should require their pickup of any waste that spills from the bins during collections.
- d) Litter spread is to be managed by the contractors collecting bins from within the property.



## 4 Minimising Waste to Landfill

A circular economy is a system where products and services are designed to be reused or ideally be regenerative i.e. to repair the environment. This differs from the predominantly linear model of “take, make and waste” that we have seen in the last few decades.

Food organics is an example of where waste can be regenerative. Food waste is now being actively used via composting to improve the quality of soils.

While occupants of buildings are generally limited in how they can impact on the design of products to make them re-useable, they can change their own and others behaviour to minimise waste.

Where possible building occupants should practice the waste reduction hierarchy identified in the Victorian Environmental Protection Act 2017.

Avoidance of landfill waste by building occupants might involve

- Purchase only what you will consume
- Purchase items of quality that can be re-used, sold on donated or up-cycled.
- Use re-usable drink bottles, lunch containers, shopping bags
- Avoid single use plastics
- Compost anything that once was alive

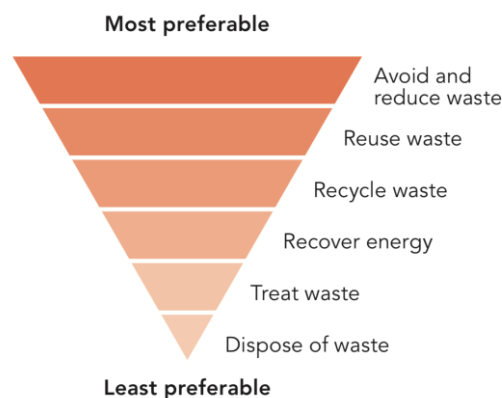
The 2025 National Packaging Targets are supported by Australian industry and government to deliver a new and sustainable approach to packaging. They apply to all packaging that is made, used and sold in Australia.

The 2025 Targets are:

- 100% reusable, recyclable or compostable packaging.
- 70% of plastic packaging being recycled or composted.
- 50% of average recycled content included in packaging (revised from 30% in 2020).
- The phase out of problematic and unnecessary single-use plastics packaging.

In March 2020, The Australian Packaging Covenant Organisation (APCO) also released a series of material-specific sub-targets relating to the uptake of recycled content in packaging

The Australian Packaging Covenant Organisation (APCO) is a not for profit organisation leading the development of a circular economy for packaging in Australia. <sup>3</sup>



<sup>3</sup> <https://apco.org.au/national-packaging-targets>

## 5 Supplementary information

### 5.1 Council Waste Directory

Yarra City Council Waste Directory:

- <https://www.yarraranges.vic.gov.au/Environment/Waste>

### 5.2 Waste Contractors

Waste collection companies in Victoria:

- Waste Wise Environmental [www.wastewise.com.au](http://www.wastewise.com.au) (Melb, Geelong, Ballarat)
- CSC Waste <https://cscwaste.com.au/> (Melb only at 08/2021)
- Waste Ninja <https://www.wasteninja.com.au>
- Kartaway <http://www.kartaway.com.au/melbourne/index.html>
- iDump Waste Management [www.idump.com.au](http://www.idump.com.au)
- Easy Waste - <http://www.easywaste.com.au>
- Citywide [www.citywide.com.au](http://www.citywide.com.au)
- JJ Richards & Sons [www.jjrichards.com.au](http://www.jjrichards.com.au) (Australia wide – depots per <https://www.jjrichards.com.au/contact/>)
- Suez (incl Sita) – [www.suez.com.au/en-au](http://www.suez.com.au/en-au) ph 13 13 35
- KS Environmental - <https://ksenvironmental.com.au/> (Melbourne only)
- Transpacific-Cleanaway - <https://www.cleanaway.com.au>, ph 13 13 39
- Veolia - <https://www.veolia.com/en>

### 5.3 Other Useful Links

- Sustainability Victoria <https://www.sustainability.vic.gov.au>
- PlanetARK <https://recyclingnearyou.com.au>
- Redcycle <https://redcycle.net.au>
- Sustainable Procurement Guide (for Commonwealth entities)  
<https://www.awe.gov.au/sites/default/files/documents/sustainable-procurement-guide.pdf>
- Wastech [www.wastech.com.au](http://www.wastech.com.au)

## Appendix 1 - Preliminary Risk Review

<b>Class 1 Risk</b> = Potential to cause death or permanent injury.	<b>Class 2 Risk</b> = Potential to cause injury requiring medical attention.	<b>Class 3 Risk</b> = Potential to cause an injury treatable with first aid.
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Activity	Steps involved in completing activity & risk	Risk level	Risk mitigating measures	Implementation responsibility
Moving of bins from bin store to collection space	Risk of manual handling injuries	2	Use max bin sizes of 660L Ensure the distance of travel is no more than 90m. The bin transfer grade should not exceed 1:14 The travel path is to be kept free of all obstacles steps, kerbs, speed bumps, berms, sills or ramps. Ensure all access points have suitably wide doorways	Owner's Corporation
Movement of commercial waste from shops to the bin store	Carting waste from the shops to the bin store.  Risk of manual handling injuries.	2-1	Commercial tenants should ensure their bin sizes are not excessive and cannot carry too much weight to safely negotiate to the bin store. Building owner to include clause in tenants contract to ensure bin sizes are not excessive due to this risk.	Owner's Corporation
Bin loading on laneway	Moving bins from temporary collection space to collection vehicle parked on the laneway. Collection may occur at the rear of the truck.  Risk of being struck by passing vehicles if step outside the line of the width of the truck	1	Bin collection operator's own safety measures incl training	Bin collection operator

Activity	Steps involved in completing activity & risk	Risk level	Risk mitigating measures	Implementation responsibility
Vehicle enters lane to rear of site for waste collection	<p>Collection vehicle entering laneway and reversing/manoeuvring before exiting in a forward direction.</p> <p>Major risk is hitting unaware people, particularly when reversing.</p>	1	<ul style="list-style-type: none"> <li>• There should no/few children/elderly people in the area.</li> <li>• Vehicle driver to enter the laneway while having good visual of the area. Upon commencing reversing, immediately check the area behind the vehicle and continue checking while reversing.</li> </ul> <p>This should reduce the risk of drivers not being aware of what is behind their vehicles.</p> <ul style="list-style-type: none"> <li>• Reversing buzzers to be applied to all trucks.</li> </ul>	Bin collection operator
<p><b>Note this assessment is for consideration during the design phase of the project. It is <u>not</u> to replace a risk assessment / Safe Work Method Statement being completed by the contractor and persons undertaking the waste removal process.</b></p>				

## Appendix 2 - Waste rates & calculations

### Proposal 1 – Commercial non-food store and bar waste calculation rates

Commercial Type	Area	Waste Generation Rates (L/unit per week)		Source	Days	Waste Generated (L/week)	
		Landfill	Recycling			Landfill	Recycling
<b>Non-food store</b>	95.3m <sup>2</sup>	50	50	SV Better Practice Guide	6	288	288
<b>Bar</b>	53.2m <sup>2</sup>	50	50	SV Better Practice Guide	6	162	162
<b>TOTAL Litres per week</b>						<b>450</b>	<b>450</b>
<b>Bin size</b>						2 x 120L	4 x 240L
<b>Collection frequency</b>						Twice weekly	Fortnightly

### Proposal 2 – Commercial café and bar waste calculation rates

Commercial Type	Area	Waste Generation Rates (L/unit per week)		Source	Days	Waste Generated (L/week)		
		Landfill	Recycling			Landfill (66%)	Recycling	FOGO (33%)
<b>Cafe</b>	95.3m <sup>2</sup>	300	200	SV Better Practice Guide	6	1133	1146	567
<b>Bar</b>	53.2m <sup>2</sup>	50	50	SV Better Practice Guide	6	107	162	54
<b>TOTAL Litres per week</b>						<b>1240</b>	<b>1308</b>	<b>621</b>
<b>Bin size</b>						1 x 660L	1 x 660L	1 x 240L
<b>Collection frequency</b>						Twice weekly	Twice weekly	Three times weekly



# Appendix 3 - Swept paths



## Appendix 4 - Better Practice Waste Recycling

Below is a range of practical information and resources to better manage &/or divert many waste types from landfill into recycling streams.

### Food Organics & Garden Organics

#### A. Tips for FOGO

- Place all food waste direct into Council provided FOGO bins once the regular council FOGO bin collection service becomes available
- Keep the wheelie bin in a shady spot
- Use paper towel to line the bottom of plastic bags to soak up any moisture that can cause the liner to break down quicker than normal
- Double wrap meat, bones and unwanted pet food (with newspaper or paper towel) before placing in your caddy
- Line the organics bin with newspaper to aid cleaning
- Wrap fish and seafood waste (in newspaper or paper towel) and place in your freezer until your next collection is due
- Sprinkle vinegar, baking soda, charcoal or eucalyptus oil in your organics bin to combat odours
- A mix of garden and food waste helps keep bin odours under control
- Purchase a Bin Kill tag that can be attached to the inside of your organics bin. The tag emits a vapour that kills flies and maggots. The product is available from Bunnings, Coles or Woolworths supermarkets.

#### B. Community Partnerships & Government Initiatives

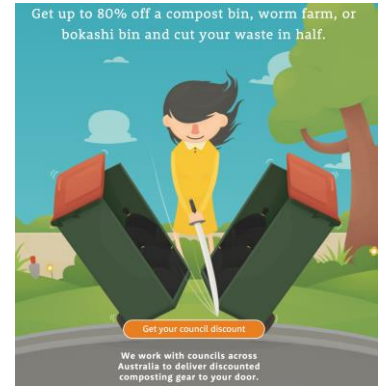
- a) **Love Food Hate Waste** aims to raise awareness of avoidable food waste from Victorian households. The average family in Victoria loses over \$2,000 a year from wasting food. And two thirds of it could have been eaten.  
<https://www.sustainability.vic.gov.au/>
- b) Sustainability Victoria provides information for households, schools and businesses alike to reduce food waste through their **Love a List Challenge**.
- c) **Community gardens** in partnership with Council may accept food waste that can be composted and used to grow food.
- d) **Sharewaste network** [www.Sharewaste.com](http://www.Sharewaste.com) to find local residents who are happy to accept compostable food in their compost heaps. The website allows the parties to connect to donate food scraps. Residents or tenants can register via the app.
- e) **Back to earth** - For more information about where your food goes when collected by contractors and how you can use it, see <https://backtoearth.vic.gov.au> an education initiative by Councils.





- f) **Join the Compost Revolution**  
<https://compostrevolution.com.au> provides up to a 80% discount on a number of composting bins and accessories. It also has a range of tutorials on how to compost.

Co-designed with councils, the Compost Revolution is a multi-award-winning program that educates and equips residents to cut their waste in half through home composting and worm farming. This platform is the only all-in-one education, infrastructure logistics and marketing program of its kind streamlining the process so that councils achieve waste and emissions reduction targets while saving money.



### C. Commercial Food waste

There are a number of onsite treatment and diversion options to remove food waste from landfill.

- b) **Surplus food donation**

There are organisations that collect surplus food for human consumption. Collectors that provide this service within Melbourne include:



**SecondBite** - SecondBite redistributes surplus fresh food to community food programs around Australia. Food is donated by farmers, wholesalers, markets, supermarkets, caterers and events. This high-quality surplus food is redistributed to community food programs that support people who are homeless, women and families in crisis, youth at risk, indigenous communities, asylum seekers and new arrivals. Contact: Emily Wild Community, Volunteer and Office Manager [emily@secondbite.org](mailto:emily@secondbite.org)



**FareShare** - FareShare, is a not-for-profit organisation, rescuing food to fight hunger. It collects quality food that would otherwise be wasted from Melbourne businesses such as food wholesalers, retailers and caterers. Volunteers in FareShare's kitchen use this food to prepare healthy, nutritious meals that they distribute to over 100 charities providing emergency food relief for the hungry and homeless. Phone: 03 9428 0044 Email: [kath.cotter@fareshare.net.au](mailto:kath.cotter@fareshare.net.au)



**OzHarvest** is the first perishable food rescue organisation in Australia collecting quality excess food from commercial outlets and delivering it, direct and free of charge, to 600 charities providing much needed assistance to vulnerable men, women and children. [www.ozharvest.org](http://www.ozharvest.org), Ph: 03 9999 5070 [melbourne.info@ozharvest.org](mailto:melbourne.info@ozharvest.org)





**FoodBank** - Foodbank is Australia's largest food relief organisation, operating on a scale that makes it crucial to the work of the front line charities who are feeding vulnerable Australians. Foodbank provides more than 70% of the food rescued for food relief organisations nation-wide. <https://www.foodbank.org.au> PH: 03 9362 8300 [info@foodbankvictoria.org.au](mailto:info@foodbankvictoria.org.au)

## Plastics, Glass & Aluminium

### D. Victoria Container Deposit Scheme

Victoria will have a container deposit scheme that will ensure more plastics, aluminium and glass containers are recycled, with the expected benefit that waste generation rates will be reduced further beyond estimates here.

This scheme will be implemented by 2023 and will allow everyone to actively participate by taking his or her recyclables directly to an out let in exchange for a monetary refund.

More information can be found at <https://www.vic.gov.au/container-deposit-scheme>

### E. The VIC Bag ban

As of 1st November 2019 there is a ban on lightweight plastic shopping bags. All retailers including restaurants are not permitted to provide or use these plastic bags.

- a) The ban applies to all lightweight plastic shopping bags that have a thickness of 35 microns or less at any part of the bag, including degradable, biodegradable and compostable bags.
- b) EPA Victoria is managing compliance monitoring and reports of suspected banned bags. Further information can be found at: <https://vicbagban.com.au> & <https://www.sustainability.vic.gov.au/PlasticBags>

### F. Hard Plastics

Hard plastic containers not collected in comingled recycling coded 1-7 (excluding polystyrene) can generally be recycled. This should be checked with each council or private collection contractor. ie toys, tubs etc

### G. Soft Plastic Recycling

Eliminating or reducing the use of single-use plastics can greatly reduce waste volumes both in residential and commercial settings. This includes straws, plastic bags and plastic wraps. Many private waste contractors can commercially collect soft Plastic.

- a) **Coles and Woolworths** both offer plastic bag and soft plastic recycling. Residents can place all plastics in one plastic bag and add it to the recycling bin at the supermarket for collection. Any location identified on the Redcycle website <http://www.redcycle.net.au/where-to-redcycle/> .
- b) **Reground** <https://www.reground.com.au/> collect soft plastics and coffee grounds. They provide bags or bins, into which soft plastics or coffee grounds are separately emptied. Reground replace bins and/ or bags on a consistent regular basis, depending on how fast they fill up. They then collect the resource and take them to community gardens and home gardeners or local plastics recyclers who put the waste to positive use.

- c) Other commercial waste contractors may also be able to collect streamed soft plastics depending on your location.

## H. Polystyrene

Expanded Polystyrene (EPS) is a problematic material that takes hundreds of years to breakdown in landfill. Despite 98% of the plastic packaging being air, EPS takes up large amounts of space in landfills where it can easily be blown away and enter our natural environment.

For residents, polystyrene can be collected separately and taken to the nearest local recovery centre that recycles this waste. These centres can be found at:

<https://recyclingnearyou.com.au/polystyrene/MelbourneVIC>

For commercial businesses, private collections should be arranged to collect and recycle this product. The following links may assist further:

- o <http://epsa.org.au/about-us/collection-centres/victoria/>
- o <https://www.inspiredwastesolutions.com.au/polystyrene-recycling-melbourne/>
- o <https://www.foamex.com.au/news/polystyrene-recycling-what-you-can-do>

## Hospitality & Packaging

### I. Hospitality Waste Reduction

- a) Responsible Cafes is an organisation that provides educational material for the hospitality section. Their website contains various resources, waste education and lists responsible cafes participating in the scheme. See <https://responsiblecafes.org>
- b) Reducing takeaway food container waste - The website Trashless Takeaway [www.trashlesstakeaway.com.au](http://www.trashlesstakeaway.com.au) lists restaurants around Australia that allow you to bring your own container to pick up your takeaway food, enabling a reduction in use of recyclable or compostable (only in some commercial composters) food containers.
- c) Yume work with leading food suppliers to ship surplus stock, that may otherwise have been wasted, to smart hospitality and retail businesses. Stock may be considered surplus for a number of reasons: a supplier may have a cancelled or placed an incorrect order, there may be no space for new stock, or a product might be close to code. This can leave primary producers, wholesalers, distributors and manufacturers with tonnes of surplus food and a lack of time or the contacts to re-sell it. Yume provides the network to sell this surplus stock. See <https://yumefood.com.au/>

### J. Packaging and food waste

One of the biggest problems causing failed recycling is the difficulty in avoiding contamination of potentially recyclable waste streams. Most waste streams are recyclable if they are separate and treated in their own way. However, when they are mixed together, they often deliver a contaminated co-mingled stream that cannot be recycled e.g. when a recyclable plastic bottle is included with compostable food waste, or a soft plastic bag goes into recycling bins. The entire contaminated load ends often ends up in landfill.

A solution can involve very careful selection of packaging. To simplify recycling, it is easier to minimise the number of waste streams people have to separate and provide clear advice on what items go into each bin.

Where food is consumed on site, to ensure food waste can be composted effectively, plates, bowls, cups, cutlery, straws, should not go into food waste bins, unless these items are domestically or commercially compostable.

Commercial composting is undertaken at higher temperatures than domestic composting. Items that are specified as commercially compostable will not compost in a domestic compost bin.

Check with each packaging supplier and also the waste contractor to ensure parties definitions of compostable align. Further, if lids are provided with compostable bases, check that they too are compostable.

Some very established compostable packaging suppliers still sell their food packaging with recyclable lids that will contaminate a compostable food waste load.

The image here is of sugarcane clamshell packaging sold with sugarcane and PET lid options. Sugarcane clamshells are plastic-free packaging that are made from reclaimed and rapidly renewable sugarcane pulp. They are certified home (domestic type) compostable but if purchased with PET lids the PET lids will contaminate the food composting load. Purchasing the sugarcane lids would remove the risk of contamination of the compostable food waste load.



As an alternative to lids, home compostable cling wrap can be used. An Australian company Great Wrap is now producing home compostable cling wrap for foods made from food waste rather than bioplastics developed from specifically grown plants. See <https://www.greatwrap.co/>

#### K. Recycling Take Away Coffee Cups

There are a number of companies that now provide take away coffee cups that can be recycled. These includes (but not limited to) <https://www.detpak.com/recycleme/> and <https://www.simplycups.com.au>.

These services will provide all of the resources required for customers to use & store cups and lids as well as collect waste on a regular basis.



### Other Items and Textiles

#### L. Other Unwanted Items

Unwanted items, clothes and other consumables can be donated to charities, sold on online or at second-hand local market places if in good condition. If repairs are required, seek out repair community centres for re-purposing.

- c) **PlanetARK** for a comprehensive listing to each council. <https://recyclingnearyou.com.au/councils/>

- d) Suppliers such as **Ecycle** <http://www.ecyclesolutions.net.au> will deliver whitegoods and either collect clean polystyrene from retailers or take polystyrene away after delivery.
- e) **TerraCycle** is a national initiative where you can look up where to deposit non-recyclable waste such as contact lenses, coffee capsules, mailing satchels, toothbrushes & tubes.  
<http://www.terracyclemap.com>



#### Colgate Oral Care Recycling Program

Recycle your oral care through this program.



- f) **Toys for Joy** recycle any brand of pre-loved toys for free with partners Big W & Terracycle. These are for toys that cannot otherwise be donated such as broken parts or just worn out. This avoids more toys in landfill. There are drop off points Australia wide at Big W stores.  
<https://www.bigw.com.au/toys-for-joy>

### M. Clothes Recycling

Textile recyclers are available Australia wide for public and commercial donators including:

- o <https://scrg.com.au>
- o <https://texrecaus.com>
- o <https://upparel.com.au/toesox-australia/>.

## Appendix 5 - Equipment

### N. Business Recycling Equipment Catalogue

70% or more of general waste placed in commercial Landfill Bins can be recycled or diverted. The quantity and type of waste will vary from business to business. Planet Arc has developed the following catalogue for businesses to access to encourage recycling where possible.

<https://equipment.businessrecycling.com.au>.

Further links and information of commonly used equipment to aid easy waste management is provided below.