



EastWaste

**WASTE MANAGEMENT
AND SERVICES GUIDE
FOR MULTI-UNIT DWELLINGS**





Why waste it?
Let's sort it.

- AVOID
- REDUCE
- RE-USE
- RECYCLE
- COMPOST

EastWaste



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INTRODUCTION AND BACKGROUND

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1.1 East Waste Services

The Eastern Waste Management Authority (East Waste) is a regional waste subsidiary of several Metropolitan Adelaide Councils with a primary purpose of providing efficient and effective residential waste and recycling collection services to these Member Councils.

1.2 Changing urban form in Metropolitan Adelaide and its impact on waste collection

As residents across metropolitan Adelaide seek to live and work near education, shops, entertainment, open space and public transport¹, the development of multi-unit dwellings, or MUDs², is becoming more common.

However, conventional waste and recycling kerbside collection systems are unlikely to be a practical or cost-effective option for occupants of MUDs. In response, East Waste offers a separate service specific to the needs of collecting waste and recyclables from MUDs.

1.3 The State MUDs Guide

The South Australian Government released the Better Practice Guide to Waste Management for Residential and Mixed use Developments (hereon titled the State Guide, see [link](#)) in 2014. This State Guide provides useful guidance to help effectively plan MUD waste services in South Australia. Readers are strongly encouraged to review the State Guide for initial planning and design purposes.

1.4 The East Waste MUDs Guide

Although the [State Guide](#) provides useful information on managing waste in MUDs across South Australia, it applies to all Councils across the state. As such, the guidance and information does not account for differences across Councils or East Waste's unique service offering.

In response, East Waste has prepared this document to provide more specific information on managing waste at MUDs within its Member Councils based on the specific services it provides and capabilities of its vehicle fleet.

The document is designed to assist developers in their planning of likely volumes generated, subsequent areas required for waste storage areas, and accessibility considerations. It is not designed as an exhaustive list of considerations.

Services need to be reviewed on a case by case basis to optimise waste management outcomes and developers are strongly encouraged to engage with East Waste and/or the Member Councils through the design and planning phases to deliver an optimal outcome for all parties.

Any final approvals will be a joint assessment between East Waste and the relevant Council.

1 See Profile ID data high density living data ([link](#)) and page 18 of the 30-year Plan for Greater Adelaide ([link](#))

2 MUDs, or multi-unit dwellings, are medium and high-density housing developments. According to *The 30 Year Plan for Greater Adelaide* the following density ranges apply to net residential site density

- Low density = less than 35 dwelling units per hectare (du/ha)
- Medium density = 35–70 du/ha
- High density = more than 70 du/ha

MUDs sometimes include commercial tenancies such as cafés in addition to the residential dwellings.



1 INTRODUCTION AND BACKGROUND

This guide should be used in conjunction with Council policy, to consider applications for a non-standard service provision (bulk bins, on-site collection and increased collection frequency).

This will assist in the circumstances where it is not the planning and design for a new development, but a service request where commercial services may have been previously provided in an apartment building. The requirements (kerb space, access, volumes etc.) of the **State Guide** still apply.

For full context this document must be read in conjunction with the relevant Council's Policy relating to waste management.

The MUDs Guide for East Waste Councils is based on fundamental waste principles (see below). Waste and recycling in South Australia is expected to be managed in line with these principles.

1.5 The Waste Hierarchy



The waste management hierarchy is a nationally and internationally accepted guide for prioritising waste management practices with the objective of achieving optimal economic, social and environmental outcomes. It sets out the preferred order of waste management practices, from avoiding the waste in the first place (so it is not generated at all, the most preferred option), through to disposal to landfill (least preferred option):

The kerbside collection service for residents is relevant to the waste management hierarchy as it provides opportunities for residents to recycle, which is a more desirable option than landfill. This is particularly the case for food waste.

1.6 Maximise diversion of waste from landfill

Better practice waste management aims to maximise diversion of waste from landfill while minimising waste generation. Residents of MUDs can maximise waste diverted from landfill by using the three-bin system offered by East Waste as well as non-Council recycling services.



1 INTRODUCTION AND BACKGROUND

Maximising diversion through the three-bin system

All Adelaide Metropolitan Councils including East Waste Member Councils offer a three-bin service to residents. This is typically provided through:

- a yellow-lidded bin for comingled recycling for items such as bottles, cans, cardboard, magazines, clean paper and clean hard plastic containers;
- a green-lidded bin for organics including garden waste, shredded or soiled paper/cardboard and food scraps; and
- a bin for general waste (red or blue-lidded bin) for other materials³, which are sent to landfill.

In addition a small kitchen caddy for the collection of food waste is provided. With close to 40% of the general waste bin comprising of food and organic material that can be turned into valuable compost, with less environmental harm and at a far cheaper cost, it is imperative systems include provisions for food waste recycling.

To maximise recycling, all suitable materials should be directed to the recycling bins (yellow-lid and green-lid bins) while minimising waste thrown into the general waste bin (red or blue lid).



Other recycling pathways

Consideration may be given to providing facilities at MUDs which aid in the appropriate collection and recycling of items that can be recycled outside of the three-bin system. For example, providing storage areas for residents to dispose of **electronic waste**, or e-waste so that this waste stream can be separated and recycled.

It should be noted that e-waste is banned from landfills in South Australia. Local options for the disposal of e-waste can be found at: eastwaste.com.au/waste-recycling/electronic-recycling

³ Note electronic waste (computers, laptops, toasters etc.), tyres, hazardous waste and hard waste items such as couches, fridges and tables are not discarded via the three bin system.



2.1 Purpose of the Guide

The East Waste MUDs Guide has been created on behalf of, and in collaboration with East Waste's Member Councils. It is intended to assist organisations and businesses involved in the management, planning and designing of residential waste management systems for MUDs within Member Council areas. The guide is expressly for residential MUDs and **not intended for commercial developments**.

The Guide has been designed to address the unique waste management challenges associated with developing MUDs, such as limited or commercially lined street frontages, large volumes of waste generated over a small footprint, typically larger travel distances between where residents live and the waste disposal points, management of residential versus commercial waste and the placement and design of waste disposal points.

The intention of the East Waste MUDs Guide is not to replace the **State Guide**, but to complement it. The East Waste MUDs Guide should be read in conjunction with the **State Guide** and any Waste Management Policy (or the like) of the Council you are developing or reside within.

2.2 When to use this Guide

This Guide should be used to assist in **planning and designing a MUD** in one of East Waste's Member Council areas, where Council collection of residential waste, organics (including food) and recyclables is proposed. The design of a new development's waste management system should be considered early in the design and planning process, along with other space infrastructure and activity requirements.

Developers and architects can use this Guide in conjunction with the **State Guide** to design a waste management system that can be serviced by East Waste and ensure that any waste management plans submitted to planning authorities have the required information (for example through a Waste Management Plan).

Planning authorities can use this guide to assess submitted waste management plans and to ensure that proposed waste management systems are appropriate. This Guide is not intended to be used for guidance on commercial waste operations.

Changeover of service for existing properties This guide can also be used in conjunction with Council policies to consider the applications of a non-standard service for existing properties.



3.1 Subdivisions

Subdivisions require careful planning to ensure adequate space is maintained for kerbside bin storage, presentation and collection.

As a general rule, each dwelling in a subdivision requires at least two (2) metres of clear kerb frontage for bin presentation. This excludes driveways, trees and other obstructions. On-street parking also needs to be considered. If a two (2) metre clearance is not possible, allowances are likely required on site for bin collection. Developers are encouraged to discuss their development design options with the respective Council if in doubt.

3.2 East Waste service offering at MUDs

Where it is impractical or unsafe to use the kerbside system, waste, recycling and organics will need to be collected by a commercial contractor.

Where MUDs are able to be serviced by East Waste, the frequency of collection of the three waste streams and the required bin sizes will be determined having regard to the number of dwellings in the MUD and the amount of room available to store, transport, present and collect bins. The total volume collected, and frequency will be set by the individual Council's Waste (or like) Policy.

Early discussion with staff from the relevant planning authority (Council or State Commission Assessment Panel (SCAP)) and, where required, East Waste staff is encouraged to ensure compatibility with an East Waste collection service.

3.3 MUD waste management system

According to the [State Guide](#), a waste management system includes the physical infrastructure (e.g. bins, collection vehicles etc.) and the operational activities (e.g. source separating, collection and disposing of waste). At a MUD site, the waste management system starts at the point of waste disposal by the tenant/resident and flows through to the collection zone where waste is collected by a truck for off-site recovery or disposal.

The State Guide provides useful information and advice on various waste management systems.



4.1 Collection services offered by East Waste

East Waste provides collection services for three streams at MUDs. These are general waste (red-lidded bin), comingled recycling (yellow-lidded bin) and organics (green-lidded bin). East Waste's services including bin sizes and collection frequency are summarised in Table 1 and Figure 1 below.

If the site meets all requirements and a non-standard collection service agreement can be negotiated and it is approved by the Council, East Waste will supply the bins and services to the site. The number of bins provided will be based on the number of dwellings and the estimated waste generation rates for the size and intensity of the development. See the [State Guide](#) for information on bin storage areas and to calculate the estimated waste generation at the site and subsequent storage area required.

Table 1: Indicative Collection Services

Bin type	Description	Bin size options (litres, L)	Bin size in metres (h x w x d)
General waste	Red-lidded bin, green body	660L	1.2 x 1.36 x 0.77
		1100L	1.39 x 1.36 x 1.09
Co-mingled recycling	Yellow-lidded bin, green body	660L	1.2 x 1.36 x 0.77
		1100L	1.39 x 1.36 x 1.09
Organics (food and garden)	Green-lidded bin, green body	660L (preferred)	1.2 x 1.36 x 0.77
		240L (if required)	1.06 x 0.58 x 0.73

Notes: 1) The total volume collected, and frequency will be set by the individual Council's Waste (or like) Policy.
 2) East Waste will not collect waste/ recyclables from commercial tenancies at MUD mixed use developments (for example, a café on the ground floor). Waste and recyclables from these sites will need to be separately stored for collection by a commercial waste collector. If the waste and recyclables are stored in the same waste room, a divider must be installed to clearly separate the bins. A divider may be a temporary fence or other such mechanism that clearly separates the two sets of bins.
 3) Hard Waste Collection Services can be negotiated.

Figure 1: Bin types and dimensions

General waste

1100L bin



Comingled Recycling

1100L bin



Organics

240L bin



660L bin



660L bin



660L bin



4 EAST WASTE SERVICING OF MUDs

4.2 Safe and convenient waste management

It is expected that waste, recycling and organics disposal and collection should be safe and convenient for residents and neighbours. Within MUDs, this means having easy and safe access to waste disposal points which are also accessible to collection vehicles and drivers. Collection vehicles should be able to enter and exit a MUD site in a safe and convenient manner. Bin movement between bin rooms and to the bin presentation and collection area should be clear of obstructions, stairs or steep slopes. OH&S considerations need to be made for all individuals involved in this process. Consideration must be made for moving larger bulk bins, particularly for organics bins which tend to be heavier.

4.3 Minimising impact to public realm

It is important that waste management causes minimal impact to the public realm. This means waste management including bin storage and collection should have provisions to minimise noise and odour as well as traffic impediments and volumes.



SERVICING MUD WASTE COLLECTION

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5.1 From bin storage area to bin presentation area

Residents first discard their waste, recycling and organics into their own bins within their own apartments or townhouses. Residents then transport the waste to communal bulk bins, either via chutes or walk the waste directly into a bin storage area. On collection days, these bins will either remain in the bin storage area or are moved to a bin presentation area for collection (see Section 5.3). Residents or building management are responsible for moving bins to the bin presentation area for collection, if it is required. It is preferred that the bin storage area be the same as the bin presentation area, so bulk bins do not need to be moved by residents. Due to the weight of bins and protection of staff against injury East Waste staff are typically unable to move bins too far or on any gradient.

5.2 Bin presentation area requirements

East Waste collection vehicles will collect the waste, recycling and organics at a frequency approved by the Council, however storage provisions for a minimum of 7 days for each stream (plus spare empty bins) must be provided. When presenting the bins, it is important that the bins are accessible to the collection vehicle. There is some flexibility regarding this and it will depend on the individual site design and requirements. As such it is imperative East Waste and the Council is involved in the design and planning discussions from an early stage. Importantly, the bin storage area must be less than ten (10) metres to the bin collection area and be on the same level (see Table 2 below).

Table 2: Bin travel routes and storage points for collection

Item	Requirement
Bin presentation area for collection	In a waste room on site that is accessible to waste collectors (preference) or at kerbside (if room permits)
Maximum distance from vehicle loading zone to bin storage area	10 metres
Minimum pathway requirements (including doors) between bin storage area, bin presentation area and waste collection vehicle loading zone	1.25 metres wide 1:15 gradient Free of obstructions, steps and should not pass through a living area, dwelling or commercially active area.

5.3 Vehicle access requirements

To be eligible for East Waste collection, developers must allow adequate room for collection vehicle access. Table 3 details the minimum vehicle dimensions.

If the developer does not allow for the East Waste vehicles to access the bins, the site will need to engage a commercial waste contractor instead. Note that if bins are to be collected from a private property, a separate access agreement indemnifying East Waste against any damage must be agreed to. A copy of this is available from East Waste.

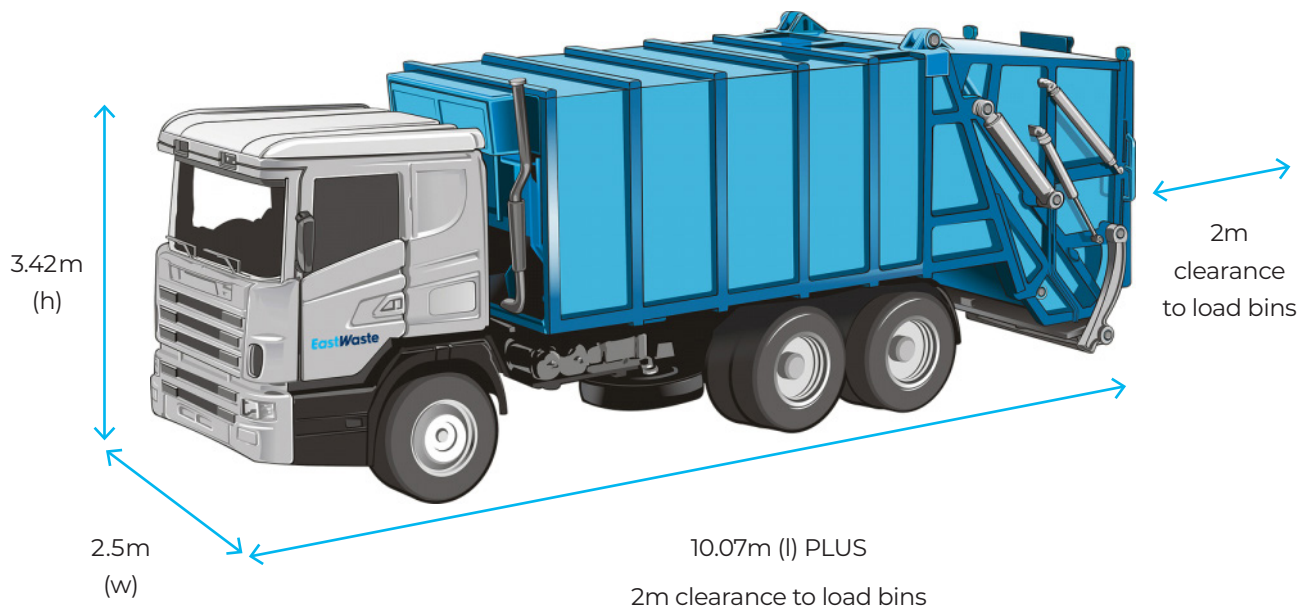


5 SERVICING MUD WASTE COLLECTION

Table 3: Vehicle size details

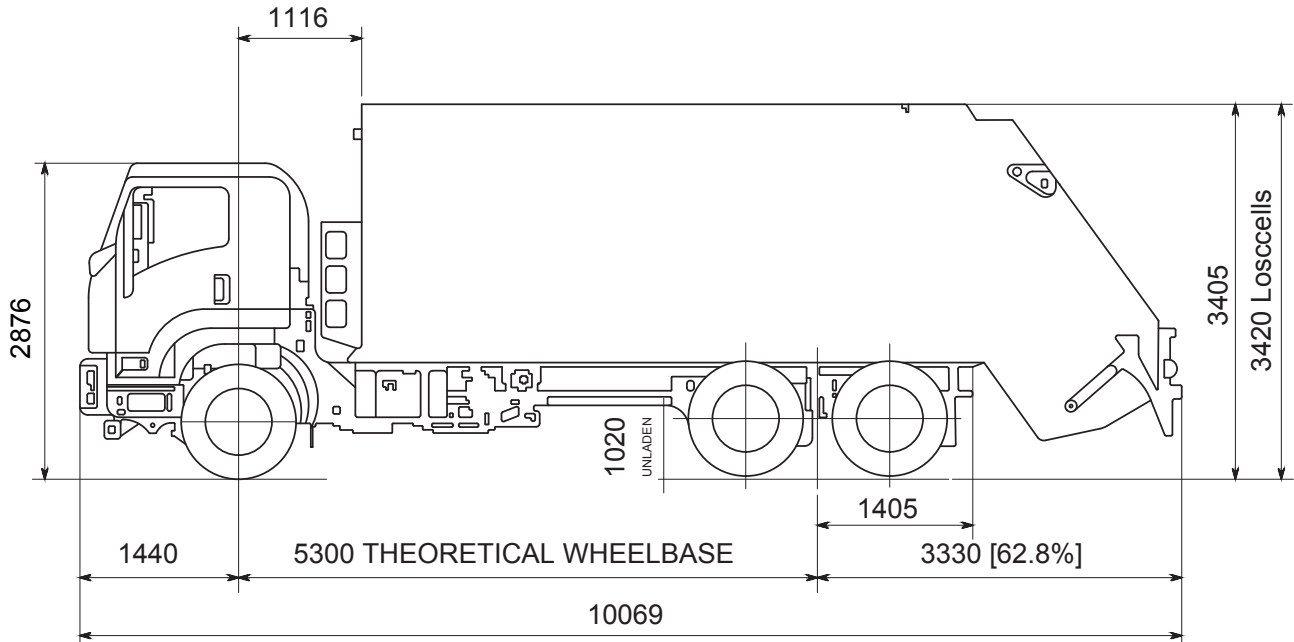
Waste truck information	Size	Minimum Clearance Requirements
Truck type	Rear-lift	Rear-Lift
Truck length	10.07m	12.5m
Clearance at the back of the truck required during bin lift	2.00m	2.00m
Truck width	2.50m	3.90m
Truck height	3.42m	4.00m
Truck height in operation	3.42m	4.00m
Truck turning circle	18.50m ⁴	18.50m ⁴

Figure 2: Vehicle size details



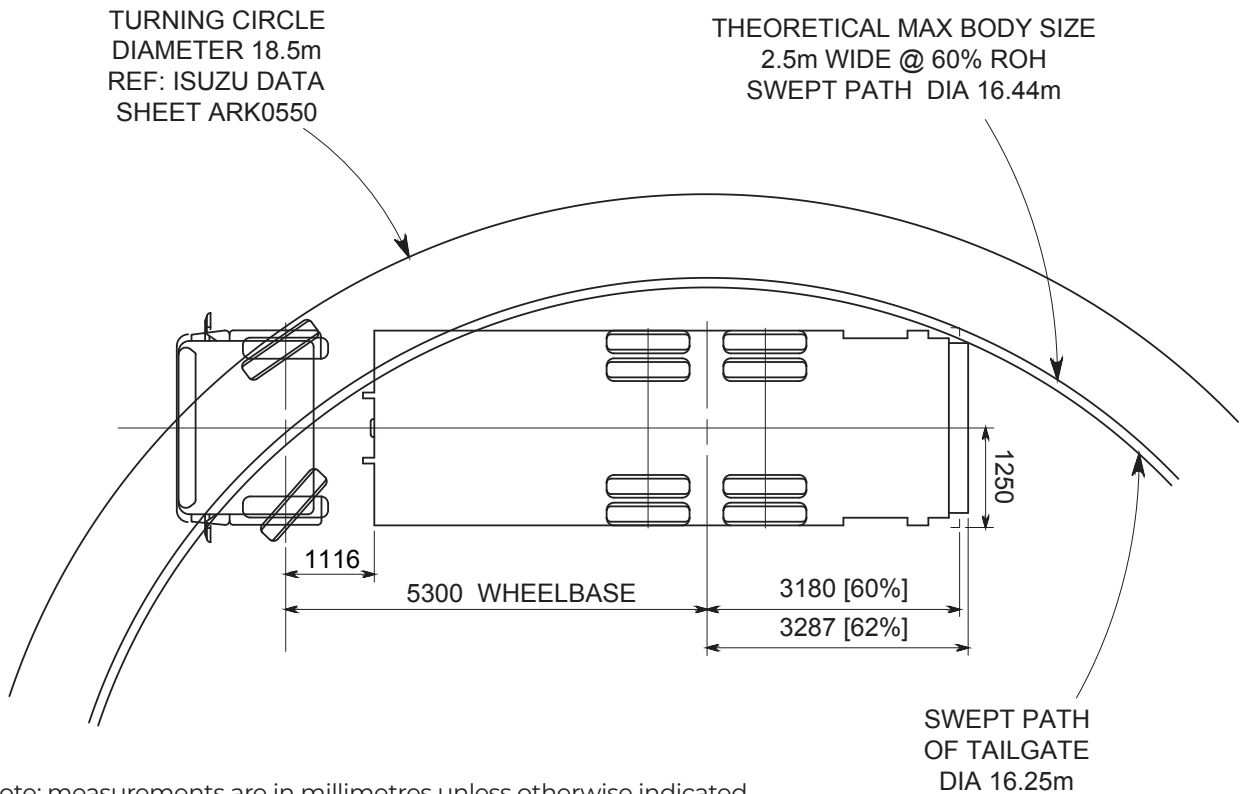
5 SERVICING MUD WASTE COLLECTION

Figure 3: Additional truck measurements



Note: measurements are in millimetres unless otherwise indicated.

Figure 4: Specific truck turning circle requirements



Note: measurements are in millimetres unless otherwise indicated.

4 Note this is the minimum turning circle standards and specific Council planning rules may include additional space or other requirements.



NON-STANDARD COLLECTION SERVICE

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Some East Waste Member Councils have a Policy which allows for provision of non-standard collection service, subject to meeting specified requirements and entering into a Waste Collection Service Agreement. Where a Council policy supports this, applications to the Council for a non-standard collection service shall be accompanied by a suitably detailed Waste Management Plan.

The Waste Management Plan should address the following:

- A commitment to waste reduction and waste separation across all three streams (recyclables, food and garden organics and landfill) together with addition waste streams (e.g. e-waste, hard waste)
- Waste generation and storage volumes (not exceeding the rates contained in Table C.2 of the South Australia Better Practice Guide Waste management for Residential and Mixed Use Developments (2014))
- Suitable collection and storage infrastructure available (bin sizes, bin chutes, common storage areas/enclosures etc)
- Designation of the person(s) responsible for the management of bins (including any securing, emptying, cleaning and moving of bins on-site)
- Access arrangements including manoeuvring areas, height clearances, site gradients, security etc
- Noise attenuation, ventilation and other amenity measures for occupants of the building/complex
- Any other issues relevant to the storage and collection of waste materials on the site
- Minimising contamination issues through bin signage and education
- Provide clear advice on the provision of hard waste and e-waste collection services to minimise illegal dumping issues.

Applications for a non-standard collection service will be assessed by the relevant Council, in consultation with East Waste and will need to demonstrate that the cost and resource efficiencies of collecting materials from larger bins would be akin to the standard service that would otherwise be provided to the site as part of multiple-tenancy standard collections.

Where an application for a non-standard service is approved by the Council, a Waste Collection Service Agreement shall be entered into between the Council, East Waste and the property owner.





7.1. Education

Ensuring residents are correctly educated and inducted on the proper use of the bins as well as hard waste and e-waste options, is critical. East Waste can assist with running short informative sessions on correct waste and recycling disposal, how to maximise recycling, reduce contamination and the extent of resources going to landfill. Providing information to residents when they are moving in or moving out is important. Induction packs should include clear instructions on the correct use of each bin as well as options for hard waste and e-waste. An exit checklist should be provided to tenants who are moving out to remind them of options for disposing of their waste correctly. East Waste can assist with providing education packs for this.

It is also important to educate facility managers and caretakers on the correct use of the bin systems.

7.2. Signage

Signage is important as an ongoing reminder for residents of what goes in which bin. It is important in the MUD design phase that the bin compound area has allowances for signage above the bins as well as for the internal bin chutes. This has been shown to significantly improve the accuracy of what residents are discarding in recycling and organics bins and decrease waste going to landfill. East Waste can assist with contemporary signage and messaging. For further information on where materials should be discarded and what services are offered by East Waste and its Member Councils, see eastwaste.com.au and whichbin.sa.gov.au.



7 EDUCATION AND SIGNAGE

COMPOST

Why waste it?

When you can compost it.

Items that can be composted (green checkmarks):

- Fruit and Vegetable scraps (Cooked & Raw)
- Seafood, Meat and Bones (Cooked & Raw)
- Tea Bags and Coffee Grounds
- Egg and Oyster Shells
- Dairy Products (Cheese & Yoghurt)
- Compostable Bags and Cutlery
- Compostable Food Packaging
- Paper Towels and Tissues
- Lawn Clippings and Weeds
- Flowers
- Garden Clippings
- Shredded Paper
- Pet Waste

Items that cannot be composted (red X marks):

- NO Plastic Bags (*100% certified compostable bags only)
- NO Plastic Containers or Packaged Food
- NO Clothing and Textiles

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RECYCLE

Why waste it?

When you can recycle it.

Items that can be recycled (yellow checkmarks):

- Paper and Cardboard
- Rigid Plastic Bottles and Containers
- Aluminium Cans and Aerosols
- Glass Bottles and Jars
- Liquid Paper Board Cartons
- Aluminium Trays and Foil
- Tins and Cans

Items that cannot be recycled (red X marks):

- NO Polystyrene Foam
- NO Plastic Bags or Wrapping
- NO Broken Crockery or Glassware
- NO Food
- NO Clothing and Textiles

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Items that cannot be recycled (red X marks):

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- NO Plastic Bags or Wrapping
- NO Broken Crockery or Glassware
- NO Food
- NO Clothing and Textiles

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PLEASE INSURE ALL CONTAINERS ARE EMPTY AND RINSED WITH CAPS OFF!

WASTE

Landfill items only!

Items that go to landfill (red X marks):

- Polystyrene/Foam/Styrofoam
- Chip Pockets & Plastic Food Packaging
- Nappies
- Old Clothing, Shoes & Rags
- Plastic Bags
- Cigarette butts (Please crush & throw into it)
- Plastic Plates Cutlery & Straws
- Broken Crockery & Glass (wrapped)

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WASTE

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7 EDUCATION AND SIGNAGE



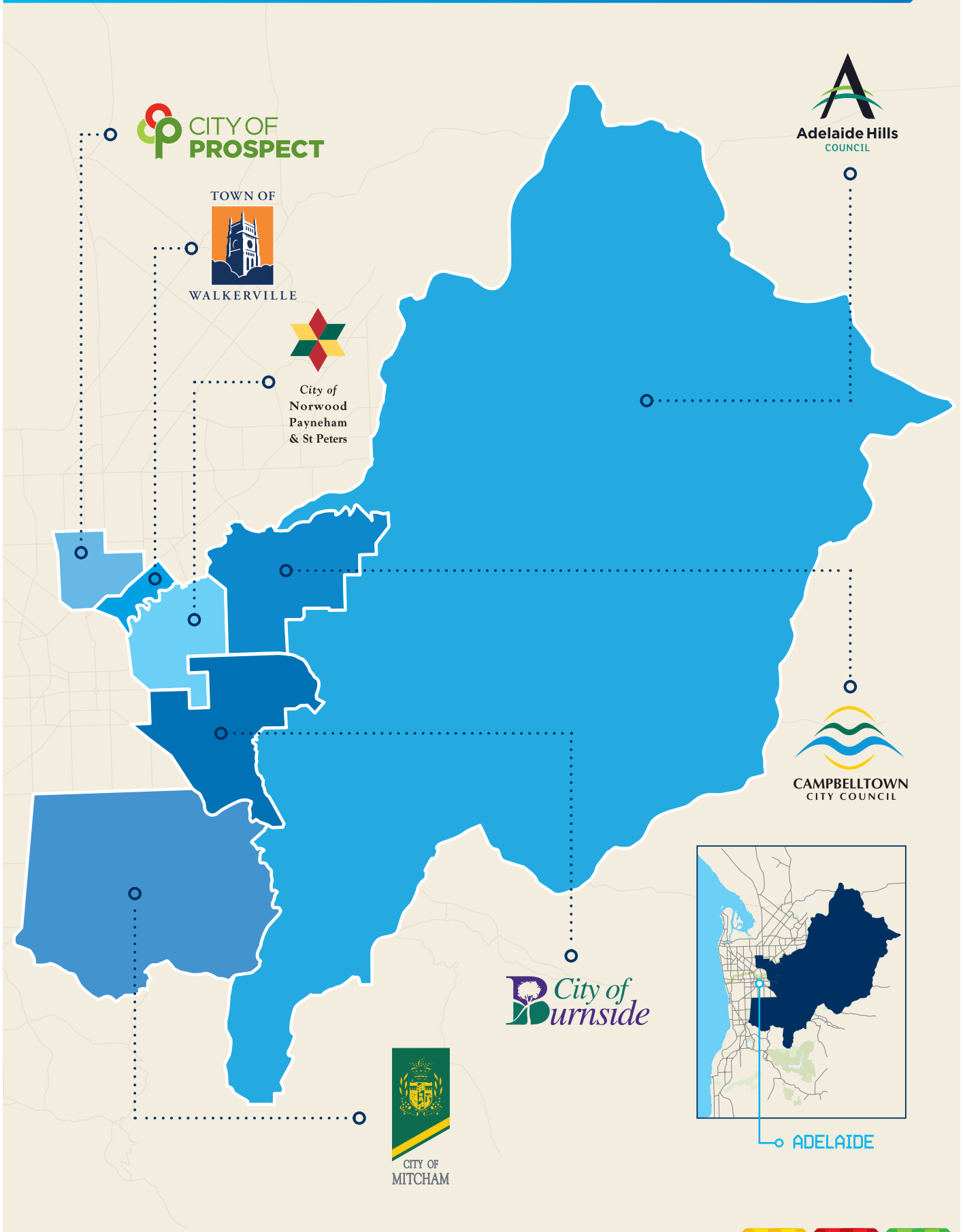
FURTHER INFORMATION AND RESOURCES

State Guide: <https://www.greenindustries.sa.gov.au/resources/better-practice-guide-for-waste-management-in-residential-mixed-use-developments-2014->

MWRRG MUDs Toolkit: <https://assets.sustainability.vic.gov.au/susvic/Guide-Waste-Management-and-Recycling-in-Multi-unit-Developments.pdf>



EAST WASTE SERVICE AREA





The document has been prepared by Rawtec with input from East Waste and its seven member Councils.

rawtec.com.au

EastWaste

 1 Temple Court
Ottoway SA 5013

 PO Box 26
Mansfield Park SA 5012

 08 8347 5111

 east@eastwaste.com

 EastWasteSA

 @East_Waste

 East Waste - Eastern Waste
Management Authority

 eastwaste.com.au