

Lake Macquarie

# ***Development Control Guidelines***

Operational Waste Management  
– for Single Dwelling Houses, Home  
Business and Home Industry



## 2 Operational Waste Management – for Single Dwelling Houses, Home Business and Home Industry

The single Dwelling Houses section covers:

- dwelling house in rural and environmental zones;
- foreshore and waterway development (single residences);
- home business and home industry; and
- housing on small and narrow lots.

See Section 3 for multi-dwelling housing, residential flat buildings, dual occupancies, secondary dwellings, attached dwellings, group homes and attached dual occupancies in rural and environmental zones, boarding houses and hostels, group homes, short-term rental accommodation and seniors living developments.

See Section 4 for most types of businesses, offices, retail, tourist accommodation, aged care facilities, child care centres, bed and breakfasts, caravan parks, entertainment, healthcare, service stations and signage.

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## **2.1 Operational Waste Management Plan for Single Dwelling Houses and Home Business**

Applicants must complete and submit an Operational Waste Management Plan (WMP) with their Development Application that confirms the development's compliance with the controls relevant to each zone and land use described in the DCP and with the guidance in the WMG.

A completed operational waste management plan is available at the end of the checklist. The applicant needs to confirm that this is accurate for the development or advise of any differences.

### **2.1.1 What needs to be included in the Operational Waste Management Plan**

The WMP identifies the types of waste that the dwelling will generate and advises Council how this waste will be managed from its source through to its disposal (at lawful reuse, recycling or landfill facilities).

The following documentation forms the WMP that Council will review to determine the ongoing waste management impacts of a proposed development:

1. completed operational WMP checklist;
2. completed operational WMP form and any alterations from the standard;
3. design and/or landscape floor plan drawings (drawn to scale) for environmental protection zone dwellings, home business, home industry, and housing on small and narrow lots showing:
  - features of bin carting routes including door/gate widths, no steps, gradients and distances between waste storage and collection points for housing on small and narrow lots; and
  - waste collection point(s); and
4. a copy of the waste management information guide that will be provided to owners, occupants and property managers of housing on small and narrow lots.

### **2.1.2 How to prepare the Operational Waste Management Plan**

Complete the operational WMP checklist in section 2.2.3 as thoroughly as possible.

Confirm that the pre-filled operational WMP form in section 2.2.4 is correct, or update it to match the proposed development's operational waste management.

The WMP checklist and form can be modified to include additional information if necessary.

Prepare design and/or landscape drawings that confirm the dwelling's compliance with the controls and guidance to meet operational controls in the DCP and WMG, as prompted by the operational WMP checklist and form.

After designing the waste management system, prepare a summary document to provide owners, property managers and occupants to explain what the intended waste management plan is for the property (e.g. where bins should be stored between collections and where they should be placed out for collection).

Compile all of the above documentation into one Waste Management Plan PDF file (other than the Landscape and Floor Plans which can be separate) and lodge it as an attachment to your Development Application.

Demolition and Construction waste management plans are required in addition to the Operational WMP (see Sections 8.1 and 9.1 for more information on preparing these WMPs). Where approval for all stages of a development proposal will be sought at the same time, then all WMPs should be collated into one comprehensive WMP document and lodged as an attachment to the Development Application.

**Tips for Preparing the Operational Waste Management Plan**

1. List and estimate waste types and volumes. The Operational Waste Management Plan template already has this information completed. However, if waste types and volumes are different for the proposed house or home business/industry, then modify the WMP as appropriate.  
(See section 2.3.1 for information on waste generation rates).

2. Design and identify ways to avoid, reuse and recycle wastes (see section 2.3.2 for help).

3. List:

- waste bin sizes and collection frequency and waste collection service providers; and
- waste destinations, recyclers, composters and landfills (see the Lake Macquarie Recycling Directory at <https://www.lakemac.com.au/waste/other-household-waste> for help).

*Standard Council services and waste destinations are pre-populated in the WMP template. If waste collection services will be different for the proposed dwelling or home business/industry, then modify the WMP as needed. (See section 4.3.3 for help).*

4. Design:

- waste storage areas (see section 2.3.4 for help)
- bin collection points (if collection is not directly from the storage area) and waste collection vehicle access (see section 2.3.5 for help);
- routes between waste storage and collection points (see section 2.3.6 for help)
- routes between units and waste storage areas (see section 2.3.7 for help)
- One to two days' waste storage in dwelling (see section 2.3.8 for help).

5. Collate waste management information for owners, property management and occupants (see section 2.3.9 for help).

## 2.1.3 Operational waste management checklist for single dwellings and home business

Checklist – Operational Waste Management for Single Dwellings and Home Business
<b>Summary of Single Dwelling Application</b>
<b>Site Address and Lot/Plan(s):</b>
<b>Development application is for (fill in figures for all applicable works):</b> ___ small lot house   ___ 1 bedroom dwelling ___ 2 bedroom dwelling   ___ 3 bedroom dwelling   ___ 4+ bedroom dwelling   ___ garage/shed(s) ___ carport/veranda(s)   ___ home business (business is _____) ___ home industry (industry is _____)   ___ Other: _____

Applicant Information
<b>Applicant's Name:</b>
<b>Applicant's Address:</b>
<b>Applicant's Phone / Mobile:</b>
<b>Applicant's Email:</b>
<b>Applicant's Authorisation:</b> System for diverting operational waste to reuse, recycling or composting is maximised. Plans/drawings that show operational waste storage areas, waste collection points and waste collection vehicle access are included in this application. The checklist has been completed accurately and in full. The details provided on this form represent the applicant's genuine intentions for managing wastes related specifically to this project.
<b>Signature of Applicant or Authorised Agent:</b>
<b>Date:</b>

Waste Types	YES	NOT YET	NO	N/A
<b>For Home Business and Industry</b> All types of ongoing operational wastes to be generated from any home business or home industry are listed.				

Avoidance, Reuse and Recycling	YES	NOT YET	NO	N/A
<b>For all single dwellings or home businesses requiring a WMP</b> Opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins are maximised.				
There is flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a wider range of waste services in future.				

<b>Internal Waste Storage Areas</b>	YES	NOT YET	NO	N/A
<b>For all single dwellings or home businesses requiring a WMP</b>				
Waste storage cupboard space is provided in or near each kitchen area				
Waste storage cupboard space is sufficiently sized to hold two days' volume of waste in at least three separated containers of 5 to 20 litres (food waste; recyclable containers; residual garbage).				
Waste storage cupboard space also has space available for separation and storage of soft plastics; and problem wastes (batteries, globes).				

<b>Route from Dwelling to External Waste Storage Areas</b>	YES	NOT YET	NO	N/A
<b>For all single dwellings or home businesses requiring a WMP</b>				
The scaled plans show waste carting route(s) from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and the waste storage area(s).				
Safe, lit access from the dwelling (and home business/industry exit if applicable) to the waste storage area is less than: <ul style="list-style-type: none"> <li>a. 75 metres in length for residences, or</li> <li>b. 50 metres in length for adaptable housing and seniors' developments.</li> </ul>				

<b>External Waste Storage Areas</b>	YES	NOT YET	NO	N/A
<b>For all single dwellings or home businesses requiring a WMP</b>				
The scaled plans show waste storage area(s) with all bins shown to scale.				
The waste storage area is screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area is located away from doors, windows and air intakes of all dwellings and businesses.				
The waste storage area is capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the household.				
For all adaptable housing, the waste storage area readily accessible to all occupants including those in wheelchairs in accordance with the Lake Macquarie City Council <i>Non-Discriminatory Access Guidelines</i> .				
The waste storage area is secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council <i>Crime Prevention Through Environmental Design Guideline</i> .				
Separate secured waste storage area(s) are provided for commercial and residential wastes.				
Bin enclosures are in character with the land use zone characteristics. They blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.				

<b>External Waste Storage Areas (continued)</b>	<b>YES</b>	<b>NOT YET</b>	<b>NO</b>	<b>N/A</b>
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures contain bin washing facilities which drain to the sewerage system, have a water supply for washing the bins and adequate lighting.				
There is sufficient storage space and a disposal plan for bulk waste.				
<b>The following sections only apply to developments related to single dwelling houses that fall under Part 9 specific land uses:</b>	<b>YES</b>	<b>NOT YET</b>	<b>NO</b>	<b>N/A</b>
<b>For Foreshore and Waterway Developments</b>				
No waste bins will be installed on jetties as any litter that spills from the bin may end up in the water. If waste bins will be installed on land near jetty then they will be located at least four metres inland from the furthest reach of waves in storms, major lake waterway flood events and tides at highest king tide.				
<b>For housing on small and narrow lots:</b>				
Waste bin storage is separately accounted from the space allocated for principle private open space and landscaping.				
The waste storage space has a minimum internal dimension of either 1955mm x 1610mm or 2390mm x 1465mm to store one set of 240 litre recycling, food/garden waste and residual garbage bins in a configuration that can be easily accessed.				
Waste bin storage does not create visual and/or odour issues for an occupant of the principle private open space.				
Waste bin storage does not compromise visual amenity of views from windows or doors of the property or neighbours.				
Waste bin storage provides a shaded area for the bins to minimise bin odour (shade provided from afternoon sun at minimum).				
Waste bin storage is set back behind the front building line, or suitably integrated visually to form part of the building line or landscaping.				
Waste bin storage is located to minimise likelihood of bin odours entering airflow points (e.g. open doors and windows) to the dwelling or adjacent properties.				

<b>Bin Carting Route from Waste Storage Area to Collection Area</b>	<b>YES</b>	<b>NOT YET</b>	<b>NO</b>	<b>N/A</b>
<b>For all single dwellings or home businesses requiring a WMP</b>				
The scaled plans show the bin carting route(s) from waste storage to collection point.				
The bin carting route(s) from waste storage area to the waste collection point(s) is unrestricted and does not contain: steps, walls, fences without gates, narrow gates, vegetation, stepping-stones, loose aggregates, or other obstacles.				
There is unobstructed, safe access to move bins and bulk waste (such as furniture and whitegoods) between the waste storage and waste collection point(s).				

<b>Bin Carting Route from Waste Storage Area to Collection Area (continued)</b>	YES	NOT YET	NO	N/A
Distance of the route from waste storage area(s) to bin collection point(s) is less than: <ul style="list-style-type: none"> <li>a. 100 metres in length for commercial developments,</li> <li>b. 75 metres in length for residences, or</li> <li>c. 50 metres in length for adaptable housing and seniors' developments;</li> </ul> Note: This does not apply to dwellings in Rural Zones (zones RU2, RU4 and RU6).				
If removing a bin from the waste storage area involves passing it through a door or gate, then the opening is at least 900mm wide and does not contain any steps. If the door or gate opens inwards, then no bins are stored within the arc of the door swing. If the door or gate opens outwards, then it does not block the pathway for moving bins out to the collection point.				
<b>The following sections only apply to developments related to single dwelling houses that fall under Part 9 specific land uses:</b>	YES	NOT YET	NO	N/A
<b>For Housing on Small and Narrow Lots:</b> Occupants have unobstructed access (without steps and on a gradient less than 1:14) to move the bins to the location where bins are placed out for collection. This may be through a side gate, through a garage, court yard, or by other unobstructed path that does not require passing through the dwelling's interior.				
<b>For Home Business and Industry</b>  The maximum amount of waste that will be generated by the home business or industry falls within the available waste storage space on the property and does not subtract from the minimum required landscaped area and private open space, nor displace a car from a garage or carport where the car will then occupy a street or visitor parking space.				
The maximum amount of waste that will be generated by the home business or industry falls within the available on-site waste storage and kerbside space for collection. If waste will be generated that exceeds the amount of storage and kerbside collection space, then the business operator will regularly remove and dispose of it at a lawful waste management facility to keep it within the limits.				
If a commercial waste collection contractor is engaged to remove waste then these collections will not exceed one waste collection vehicle per waste stream per week, and will not require a hook lift vehicle, so as to minimise noise and waste collection vehicle traffic movements in the area.				
<b>For Home Industry only</b>  The development does not require a licence under the <i>NSW Protection of the Environment Operations Act 1997</i> nor generate waste that requires collection by a licensed waster transporter. No more than 12 waste tyres will be stored on the premises at any one time.				



Waste Collection Area(s)	YES	NOT YET	NO	N/A
<p><b>For all single dwellings or home businesses requiring a WMP</b></p> <p>The scaled plans show waste collection area with all bins drawn to scale and that there is sufficient room at the collection area for bins to be spaced with at least 300mm gaps between bins.</p>				
<p>Bins can be placed out for collection in a reasonably flat kerbside location so that they are not prone to falling over after they are emptied.</p>				
<p>Bins can be placed out for collection in locations that will not obstruct traffic, driveways, access to and from garages, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales and access to letterboxes.</p>				
<p><b>The following section only applies to developments related to single dwelling houses that fall under Part 9 specific land uses:</b></p>	YES	NOT YET	NO	N/A
<p><b>For Housing on Small and Narrow Lots:</b></p> <p>There is sufficient unobstructed space allowing for two waste service bins per dwelling to be placed on the kerb for collection on each waste collection day, or there is an alternative shared waste service solution with suitable shared storage locations explained in an attachment to the operational waste management plan.</p>				
<p>Sufficient unobstructed space is available to allow for 1 cubic metre per dwelling of bulk waste (including furniture and whitegoods) to be placed kerbside for collection, or there is an alternative shared waste service solution with suitable shared waste storage and collection locations detailed in an attachment to the operational waste management plan.</p>				

Waste Collection Vehicle Access	YES	NOT YET	NO	N/A
<p><b>For all single dwellings or home businesses requiring a WMP</b></p> <p>The waste collection point is unobstructed and can be safely and efficiently accessed by Council waste collection vehicles. The collection point for bins is not blocked by on-street parking, driveways, street tree planting, roundabouts, parking bays, No Stopping zones, bus stops or utilities infrastructure (such as power poles or hydrants). Bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements.</p>				

Operational Waste Management Plan Completion	YES	NOT YET	NO	N/A
<p>Comments about any deviation from the above waste management controls:</p>				
<p>Waste Management Plan Checklist and coversheet has been completed and signed.</p>				

## 2.1.4 Operational waste management plan for single dwellings and home business (residential)

### **OPERATIONAL WASTE MANAGEMENT PLAN – RESIDENTIAL SINGLE DWELLINGS AND HOME BUSINESS**

Ongoing operational waste will be minimised by using Council’s food/garden waste and recycling bins. Other proposed resource recovery initiatives include: \_\_\_\_\_ . (Write N/A if no additional initiatives apply.)

**Attachments** – the following documents are attached to this application:

Floor/landscape plan drawing(s) showing:

- All bins (drawn to scale) placed in their proposed storage and collection points (including measurements demonstrating enough space to open bin lids in the waste storage area and no obstructions beside or above bin collection points to prevent bin lifts during waste collection)
- Route(s) between waste storage and collection point(s) (including measurements of carting distance, gradients, door/gate widths, no steps)
- The standard household waste plan below applies to this house. OR
- The following additional waste services are needed to cater for home business/industry: \_\_\_\_\_.

<b>SINGLE DWELLING</b>	<b>Litres per week</b>	<b>Bin size, Number of bins, Collection frequency</b>	<b>Reuse on site</b>	<b>Reuse or recycling offsite</b>	<b>Disposal to licenced landfill</b>
<b>Waste Type:</b>	Standard collections		Specify proposed on site reuse methods and waste volume	Specify recycling collection service provider and recycling facility destination	Specify waste collection service provider and landfill destination
<b>Recyclables</b> bottles, containers, paper and cardboard	70L -180L	240 litre or 360 litre bin; fortnightly collection	n/a	Council kerbside recycling collection service; recycling at Solo Gateshead facility	n/a
<b>Green waste</b> food and garden organic waste	70L - 240L	240 litre green waste bin; weekly collection	Onsite composting or worm-farming; 5L food and ≤120L garden waste per week; reuse in home garden (delete if N/A)	Council food and garden waste collection service; processed at Lake Macquarie Organics Resource Recovery composting plant located on the Awaba Waste Management Facility	n/a
<b>Garbage</b> other non-recyclable wastes	40L - 120L	240 litre garbage bin; fortnightly collection	n/a	n/a	240L/fortnight Lake Macquarie City Council kerbside collection service.
<b>Bulky waste</b> furniture, e-waste, mattresses, metals and whitegoods	1-2 m <sup>3</sup> per collection	2 x 1 metre space near kerb for bulky waste; collected by Council bulk waste program.	n/a	Council kerbside bulk waste collection service; e-waste, whitegoods, metals, mattresses and bundled garden waste recycled through Council contracts.	Council kerbside bulk waste collection service; residual bulk waste landfilled at Awaba Waste Management Facility.
<b>Problem wastes</b> oil, paint, chemicals, gas bottles, batteries, sharps	As arises over the year	n/a	n/a	Deliver to Community Recycling Centre at Awaba Waste Management Facility; sharps to chemists; batteries to library recycling stations	n/a

## 2.1.5 Waste Management Information Guide for Owners, Property Managers and Occupants - Example

Address: (address of development) \_\_\_\_\_

The following is information about how this development has been designed to accommodate separation of waste, waste storage and waste management.

### **Internal Bin Storage:**

A waste cupboard is available in the kitchen for mini bins between 2 litre and 20 litres size, so that you can separate and store 1-2 days of:

- Compostable food scraps for green lid waste bin kerbside collection
- Return and Earn containers
- Other recyclable containers and paper for yellow lid bin kerbside collection
- Batteries, mobile phones, smoke detectors, CDs and lightglobes for recycling through Council's services
- Bottles of used cooking oil for recycling through Council's services
- Plastic wrap and film for recycling through supermarkets
- Residual garbage for red (or black) lid kerbside collection

### **External Waste Storage:**

Location – Keep your bins in one of the following locations:

- in the garage nook created for this purpose
- at the end of the garage (if this is longer so that bins can be kept in front of the car)
- at the side of the garage (if this is wider so that bins can be kept beside the car)
- in the side/back/front yard behind the screen/water tank/garage out of view of the road/driveway/neighbours.

Bins can be washed out using the tap in the garden.

The light switch for the yard/garage is located to the left of the entrance doorway.

Bulk waste – used furniture, whitegoods, electronic waste, large furniture and mattresses - check with Council whether a bulk waste collection service is available to this property on a regular basis or as an on-call service.

### **Placing bins out for collection:**

Bins are to be placed out on the kerbside on ABC Street (outside house number 55 (if battle-ax block) for collection. Check with Council/Private Waste Contractor which night to place which bins out. Bins are to be brought back in within 24 hours of emptying.

### **Bin collections:**

On bin collection day, residents and visitors must not park in front of the bins at kerbside. Bins must be placed with a minimum of 30 centimetres between them and facing the road. All recycling and garbage bins should be placed together and all green waste bins together.

### **Other Notes:**

Sharps and medical waste must be kept separate and disposed of through the correct storage containers/bins/waste service.

## 2.2 Waste Aspects of the Development Control Plan – for Single Dwelling Houses

The Lake Macquarie City Council Development Control Plan (DCP) sets out broad objectives and controls for the operational uses of land.

### **Zones (DCP Parts 2-7)**

Single dwelling houses can be built in Residential Zones (zones R1, R2 and R3), most Rural Zones (zones RU2, RU4 and RU6) and most Environment Protection Zones (EPZ) (zones E2, E3 and E4).

The applicable DCP objectives and controls are therefore defined in zones in DCP Parts 2 (Rural Zones), 3 (Residential Zones) and 7 (Environment Protection Zones).

The broad objectives and controls relevant to single dwelling constructions are summarised below in WMG sections 2.2.1 (objectives) and 2.2.2 (controls).

In Rural Zones (zones RU2, RU4 and RU6), there is one less operational use detailed control than the Residential Zones (R1, R2 and R3) controls. Development controls for operational use are the same between the Residential and Environment Protection Zones (zones E2, E3 and E4).

### **Specific Land Uses (DCP Part 9)**

Objectives and controls are also defined for specific land uses in the DCP (Part 9). The specific land uses relevant to single dwelling houses covered in this section of the WMG are:

- dwelling house in Rural and Environmental Zones (relates to DCP 9.5);
- home business and home industry (relates to DCP 9.9);
- housing on small and narrow lots (relates to DCP 9.19); and
- foreshore and waterway development (relates to DCP 9.7) – relevant to foreshore adjacent to zones R2, R3, E2, E3 (e.g. at Little Pelican) and E4 (e.g. at Dora Creek).

### **Guidance to meet controls**

The controls specified in the DCP require that all operational use waste management be undertaken in accordance with the Waste Management Guidelines. In order to achieve effective operational waste management outcomes, guidance to meet controls should be met as this provides details on the controls listed in the DCP document.

The guidance to meet controls is outlined in:

- 2.2.3 for all zones
- 2.2.4 for Residential and Environment Protection Zones ; and
- 2.2.5 for guidance associated with the specific land uses covered under DCP Part 9.

## 2.2.1 General operational objectives (DCP Parts 2-7)

The following objectives for waste management specified in the DCP apply to single dwelling houses, houses on narrow lots, home businesses and home industries. These apply in all zones (Rural, Residential and Environment Protection Zones (zones E2, E3 and E4)).

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	<b>Objectives and controls</b> by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	<b>Guidance</b> by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

### Objectives

- a. To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
- b. To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
- c. To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
- d. To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
- e. To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
- f. To ensure secure separation of commercial waste from residential waste storage and collection.
- g. To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
- h. To provide unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and waste storage points and to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.

The following additional objective applies in Environment Protection Zones (E2, E3 and E4):

- i. To integrate with the natural landscape.

## 2.2.2 Operational controls (DCP Parts 2-7)

The following controls for waste management specified in the DCP apply to single dwelling houses, houses on narrow lots, home businesses and home industries. These apply in all zones (Rural, Residential and Environment Protection Zones (zones E2, E3 and E4).

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	<b>Objectives and controls</b> by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	<b>Guidance</b> by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

### Controls (only those from the DCP relevant to waste)

1. An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified: in the list a to e below; in other parts of this Development Control Plan; or when Council identifies that particular circumstances warrant it.

Uses requiring an Operational Waste Management Plan:

a. Dwellings
b. Commercial and retail, recreation and tourism facilities
c. Industrial developments and infrastructure
d. Events
e. Subdivisions

2. The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.
3. The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:
  - a. bin type, sizes, numbers and collection frequency; and
  - b. internal storage within premises; and
  - c. waste carting route(s) from premises to external waste storage area(s); and
  - d. external waste storage areas; and
  - e. bin carting route(s) from waste storage to waste collection point(s); and
  - f. waste collection point(s); and
  - g. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
  - h. waste management information guide for owners and occupants.
4. For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:
  - i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
  - ii. commercial and retail premises;
  - iii. veterinary hospitals;
  - iv. aged care facilities;
  - v. child care centres;
  - vi. service stations;
  - vii. public and private recreation; and amusement and functions centres and entertainment facilities;
  - viii. vehicle repair workshops and depots;

- ix. *sustainable aquaculture; and*
- x. *light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.*

*to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.*

5. *If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.*

### 2.2.3 Guidance to meet operational controls – all zones

The following guidance to meet operational controls for waste management apply in all zones to the single dwelling houses, home businesses and home industries listed in section 2.2. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	<b>Objectives and controls</b> by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
<b>WMG</b>	<b>Guidance</b> by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

### Guidance to meet operational controls – all zones

#### Bin type, sizes, numbers and collection frequency:

1. Total waste volumes (in each of the separated waste types of comingled recycling, compostable organics (food and garden), residual unrecyclable garbage and any other separately recyclable waste types) that are anticipated to be generated from the operational use of the residential and, separately, the commercial use of the development in peak use times should be calculated and advised.
2. For each waste type, the bin type, bin size and number of bins and frequency of collection should be calculated and advised to ensure all waste is removed daily or each few days (for commercial volumes of waste of an odorous nature), weekly (for food organics) or fortnightly.

#### Internal storage:

3. Waste storage cupboard space should be provided in or near each kitchen area. This should be sufficiently sized to hold two days' volume of waste in at least three separated containers, sized between two and twenty litres. The containers should be for co-mingled recyclables (like glass, plastic containers, paper and cardboard), food waste, and residual garbage. (Preferably there should also be space for separate containers for other separable waste types such as soft plastic wrap, "return and earn" bottles and problem wastes (such as batteries, light globes and paint).)

#### Waste carting route(s) from premises to waste storage area(s):

4. Safe, lit access from dwelling or business exit to allocated bin storage area should be provided that is less than:
  - a. 100 metres in length for commercial developments;
  - b. 75 metres in length for residences; or
  - c. 50 metres in length for adaptable housing, seniors' developments, child care, food-serving premises and other businesses from which emptying of bins multiple times per day is desirable.



External waste storage area(s):

5. Waste storage area(s) should be provided and meet the following criteria:
  - a. Waste storage area(s) should be screened from the main living spaces of dwellings, public road and views from neighbours and as part of odour management should be located away from doors, windows and air intakes of all dwellings and businesses.
  - b. The waste storage area(s) should be capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins and any other proposed waste management equipment (such as bin carts and compaction equipment) required for managing the ongoing use waste generated by the property.
  - c. Waste storage area(s) should be readily accessible to all occupants in accordance with the Lake Macquarie City Council *Non-Discriminatory Access Guidelines*, should be secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.
  - d. The waste storage area(s) bin removal door or gate should not have a threshold step, should be at least 1200mm wide where bins up to 360 litres in size are used and should be at least 1600mm wide where bins up to 1100 litres in size are used. If doors or gates open inwards, no bins can be stored within the arc of the swinging door. If doors or gates open outwards they should not block the pathway for moving bins out.
  - e. Separate secured waste storage area(s) should be provided for commercial and residential wastes.
  - f. Bin enclosures should be in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.
  - g. Bin enclosures should contain measures to prevent entry by vermin.
  - h. Shared bin enclosures should have lighting, water supply and bin washing facilities that drain to the sewer.
  - i. Sufficient storage space and disposal plan for bulk waste, which includes furniture and whitegoods, should be provided.
  - j. Bins should be clearly marked with information on what types of waste are to be included in the bins. Yellow lids should be used for comingled recycling, lime green lids for food and garden organic waste, and red lids for residual garbage. Sky blue lids are appropriate for cardboard and paper (if privately serviced from commercial premises separately from comingled recycling).

Bin Carting Routes from Waste Storage to Waste Collection Points:

6. Mobile bin carting routes from the waste storage area to the bin collection point(s) should allow for unrestricted passage of bins and not contain steps, walls, fences without gates, narrow gates, vegetation, stepping stones, loose aggregates, or other obstacles. The distance and gradient should be suitable for the bin size as follows:
  - a. for wheeled bins greater than 360 litres and up to 660 litres, bin carting distances that are not over five metres at gradients that are not steeper than 1:30; and
  - b. for wheeled bins over 660 litres, bin carting distances that are not over three metres at gradients that are not steeper than 1:30
  - c.\*for wheeled bins up to and including 360 litres size, bin carting should be at gradients that are not steeper than 1:14 and distances that are not over:
    - i. 100 metres in length for commercial developments,
    - ii. 75 metres in length for residences, or
    - iii. 50 metres in length for adaptable housing and seniors' developments;

\*Point C does not apply to multiple dwelling houses in Rural Zones (zones RU2, RU3, RU4 and RU6).

### Waste Collection Points:

7. The waste collection point(s) should meet the following criteria:
  - a. The waste collection area(s) should be sufficiently sized to enable collection from the property of all wastes generated;
  - b. Where mobile garbage bins (MGBs) 360 litre size and smaller are to be placed on the kerbside of a Council road or property's internal roadway for side-lift waste collection vehicle:
    - i. sufficient space should be allocated so that bins can be spaced with at least 300mm between bins and 300mm either side of a row of bins. These should be drawn on the landscape plans, with individual bins shown to scale at correct spacing; and
    - ii. bins should be placed out for collection in a reasonably flat kerbside location (such that bins will not fall over when emptied) that does not obstruct traffic and pedestrian flows, roundabouts, parking bays, No Stopping zones, bus stops, gutters, drainage swales, driver site lines, access to letterboxes, or access to and from garages; and where bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements;
  - c. Mobile garbage bins (MGBs) of 660 litre and 1100 litre size must be collected from onsite by waste collection vehicles entering the site, unless the site can meet the following criteria for the bins to be collected on the kerbside of a Council road by rear-lift waste collection vehicle, which requires:
    - i. a 1:30 gradient or flatter hard surface slab is to be provided within the property boundary and flush with the driveway to temporarily store the waste bins;
    - ii. the slab should have enough space to move bins around each other and replace empty bins while removing full bins, and should have stoppers to prevent bins running off the slab (while not preventing moving the bins to the kerb for emptying);
    - iii. the distance to move the bins along the driveway should be less than 5 metres and the gradient along and across the driveway to the kerb should be 1:30 or less;
    - iv. the road gradient should be less than 1:30 across and down the parking lane at the driveway; and
    - v. the 10 metre space immediately after the driveway should be retained as a stopping location for the waste collection vehicle (not car parking) on waste collection days. It may be No Parking, Loading Zone or Truck Zone.

(See Appendix 4 for information about bin spacing for kerbside collection)

### Waste Collection Vehicle Routes (onsite):

8. For any bins to be collected onsite, the access for waste collection vehicles should:
  - a. require a maximum of only one reversing manoeuvre to enter or leave the site and turn on site;
  - b. be able to stand wholly within the site and not block on-site car parking, or access and egress from the property;
  - c. meet specifications for pavement quality (for gross weight bearing), turn, width and height clearances and lift arc requirements for locally available waste collection vehicles (specifications as identified in the Lake Macquarie City Council Waste Management Guidelines);
  - d. for side-lift waste vehicle onsite access, demonstrate vehicle turn arcs are sufficient for 10 metre length domestic side-lift waste collection vehicles (or be in accordance with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles);
  - e. for rear-lift waste vehicle onsite access, demonstrate vehicle turn arcs are sufficient for rear-lift waste collection vehicles of 8 metres length (or be in accordance with the *Lake Macquarie City Council Vehicle Access Guidelines* Medium Rigid Vehicle (MRV) standard or have turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles); and
  - f. implement measures to mitigate the impacts of noise associated with the management of waste. (Noise should be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.)

9. Where the design does not provide for the current Council waste collection vehicle access specifications, a signed letter should be provided from a local waste service provider confirming that they can provide an alternative service. The letter must detail the alternative collection solution, the collection methods offered (such as runners and where the vehicle will park) and the specifications and dimensions of the waste collection vehicles that will be used.
10. Provision of Council waste services will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement.

Waste Management Information Guide:

11. A copy of waste management information that will be provided to building owners and occupants is to be included in the development application.

### 2.2.4 Dwellings in rural and EPZ – specific land use objectives and controls (DCP Part 9.5)

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
<b>DCP</b>	<b>Objectives and controls</b> by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	<b>Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19</b>	DCP Parts 2 - 7
<b>WMG</b>	<b>Guidance</b> by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

The additional controls specified in Part 2 and Part 7 (respectively) of the DCP apply. No further waste management controls are required for single dwelling, home business or home industry developments in Rural and Environment Protection Zones (EPZ).

### 2.2.5 Foreshore and waterway development – specific land use objectives and controls (DCP Part 9.7)

This section applies to residential developments related to single dwelling houses that fall under DCP Part 9 land uses “foreshore and waterway development”. It includes domestic boat sheds and jetties.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
<b>DCP</b>	<b>Objectives and controls</b> by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	<b>Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19</b>	DCP Parts 2 - 7
<b>WMG</b>	<b>Guidance</b> by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

**Objectives** (only those from the DCP relevant to waste)

- a. To protect the visual character and natural landscape of Lake Macquarie, by restricting the erection of buildings and structures at the Lake foreshore.
- d. To permit private development of foreshore land while maintaining foreshore public reserves and maintaining public access to the foreshore.
- e. To maximise opportunity for organic green waste, recycling and garbage to be collected separately for maximum resource recovery.
- f. To ensure that hazardous and liquid wastes are managed properly to not risk pollution of the waterway or foreshore.

## Foreshore and Waterway Development - Domestic Boat Sheds:

### Controls (only those from the DCP relevant to waste)

Waste Avoidance:

4. A boat shed must not include washing and/ or cooking facilities, habitable rooms, or entertaining areas/ facilities.

Waste Storage Area:

5. A boat shed must not include storage of hazardous or liquid wastes.

### 2.2.6 Home business and home industry – specific land use objectives and controls (DCP Part 9.9)

This section applies to developments that include home businesses and home industry. These land uses fall under DCP Part 9.9.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

This section of the DCP provides Council's specific requirements for home business and home industry developments. Other requirements are contained in the relevant general development part(s) of the DCP (DCP Parts 2 to 7) and/or Area Plans (DCP Parts 10 to 12). Where a conflict exists between DCP Part 9.9 and the general development part of LM DCP 2014, then 9.9 prevails.

Home business and home industry are separate uses under LM LEP 2014; however, for the purpose of this DCP, they have the same objectives and some similar controls as well as guidance. Development for the purposes of Home Business or Home Industry must comply with the definitions below.

Note: health, safety, certification or registration requirements may regulate home activities. Refer to the Building Code of Australia, WorkCover Authority and verify with Council's Environmental Health and Building Officers when preparing an application for assessment by Council.

**Home business** means a business that is carried on in a dwelling, or in a building ancillary to a dwelling, by one or more permanent residents of the dwelling and that does not involve:

- a. the employment of more than two persons other than those residents;
- b. interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise;
- c. the exposure to view, from any adjacent premises or from any public place, of any unsightly matter;
- d. the exhibition of any signage (other than a business identification sign); or
- e. the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail, except for goods produced at the dwelling or building, however, does not include bed and breakfast accommodation, home occupation (sex services) or sex services premises.

However, this does not include bed and breakfast accommodation, home occupation (sex services) or sex services premises.

**Home industry** means a dwelling (or a building ancillary to a dwelling) used by one or more permanent residents of the dwelling to carry out an industrial activity that does not involve any of the following:

- a. the employment of more than two persons other than those residents;
- b. interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise;
- c. the exposure to view, from any adjacent premises or from any public place, of any unsightly matter;
- d. the exhibition of any signage (other than a business identification sign); or
- e. the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail, except for goods produced at the dwelling or building, however, does not include bed and breakfast accommodation or sex services premises.

However, this does not include bed and breakfast accommodation, home occupation (sex services) or sex services premises.

**Objectives** (only those from the DCP relevant to waste)

- a. To encourage and support home based employment opportunities where they are of a low-key scale suitable to a dwelling and do not unreasonably impact on surrounding residences.

**Controls** (only those from the DCP relevant to waste)

For home business and home industry:

Route from premises to waste storage areas:

9. The development should provide for non-discriminatory access.

Waste Storage Areas:

11. The maximum amount of waste that can be generated by the home business or industry is limited by the availability of sufficient waste storage space. The space needed for waste storage cannot subtract from the minimum required landscaped area and private open space, nor displace a car from a garage or carport where the car will then occupy a visitor parking space or neighbour's kerbside.

Waste Collection Points:

12. The maximum amount of waste that can be generated by the home business or industry is also limited by the availability of sufficient waste space for collection of that waste on the kerbside, unless the waste will be regularly removed by the home business or industry operator in their own vehicle for delivery to lawful waste management facilities.
13. The maximum commercial waste that can be generated by the home industry or home business per week is 4140 litres in mobile waste bins including household wastes.
14. To minimise disturbance in residential areas, commercial waste can only be collected a maximum of once per week (maximum of one waste collection vehicle per waste stream per week).

For Home Industry only:

Waste Type and Volumes:

17. The development must not require a licence under the NSW Protection of the Environment Operations Act 1997 nor generate waste that requires collection by a licensed waste transporter. The business must also not store more than 12 waste tyres on the premises at any one time.

## 2.2.7 Housing on small and narrow lots – specific land use objectives and controls (DCP Part 9.19)

Developments designated as housing on small and narrow have the additional objectives and controls provided below as per DCP Part 9.19.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	Objectives and controls by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	Guidance by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

### Waste Collection Points:

#### Design of Driveways – Street Trees and On Street Parking (DCP 9.19 – section 1.5)

##### Controls

1. The location of driveways must be determined with regard to the location of utilities infrastructure, safe and unobstructed kerbside space to place waste service bins out for collection, street tree planting and to maximise the availability of on-street parking.

#### Utilities (DCP 9.19 – section 1.6)

##### Objectives (only those from the DCP relevant to waste)

- a. To identify utility requirements and new infrastructure at an early stage of development.
- b. To ensure utilities structures are integrated in the site planning and design of development.

##### Controls (only those from the DCP relevant to waste)

1. The location of utilities, including gully pits, water meters, power poles, communications pits, underground services and manholes must not interfere with driveways or driveway crossovers of narrow frontage lots.
2. The location of above ground utilities, including power poles and lines, must not interfere with waste collection space and waste collection vehicle bin lift clearances.

### Waste Storage Area:

#### Principal Private Open Space (DCP 9.19 – section 1.8)

##### Controls (only those from the DCP relevant to waste)

3. The principle open space must not include the space allocated to waste storage.

#### Operational Waste Management (DCP 9.19 – section 1.10)

##### Objectives (only those from the DCP relevant to waste)

- a. To ensure dwellings have equitable access to waste collection services; and
- b. To ensure that the practical requirements for waste management are met in such a way as to minimise negative impacts on the occupants and neighbours.

##### Controls

### Waste Storage Area:

1. Waste bin storage is to be appropriately located to:
  - i. be separately accounted from that space allocated for principle private open space and landscaping;
  - ii. have a waste storage space per dwelling of minimum internal dimensions of either 1955mm x 1610mm or 2390mm x 1465mm to store one set of 240 litre recycling, food and garden waste and residual garbage bins;

- iii. not compromise visual amenity for an occupant of the principle private open space;*
- iv. have the bins in a shaded area, at least from afternoon sun, to minimise bin odour;*
- v. not compromise visual amenity of views from windows or doors of the property or neighbours*
- vi. be set back behind the front building line, or suitably integrated visually to form part of the building line or landscaping;*
- vii. locate bins where odours are least likely to enter airflow for doors, windows and air vent intakes for this or adjacent properties; and*
- viii. have unobstructed access (without steps and on a gradient less than 1:14) to move the bins to the location where bins are placed out for collection, which may be through a side gate, through a garage, courtyard or by other unobstructed path that does not require passing through the dwelling's interior.*

### Waste Collection Points:

- 2. Sufficient unobstructed space must be provided to allow for two waste bins per dwelling to be placed kerbside for collection on any waste collection day, or alternative shared waste service solutions planned with suitable shared storage locations.*
- 3. Sufficient unobstructed space must be provided to allow for one cubic metre per dwelling of bulk waste (including furniture and whitegoods) to be placed kerbside for collection, or a suitable alternative bulk waste collection management option must be provided and described in the Operational Waste Management Plan.*

## 2.3 Single Dwelling Waste Management - Information to Assist with Planning

### 2.3.1 Waste types and volumes for single dwelling houses

#### **Kerbside collectable wastes (mobile garbage bins)**

In Lake Macquarie City, recyclables (like glass and plastic containers and paper and cardboard), green waste (food and garden wastes) and residual (other than problem waste) garbage are collected from the kerbside in mobile garbage bins.

For single dwelling houses, bins are normally 240 litres in size for Council waste collection services. A 360 litre bin is available for recycling. Households may also opt to have additional 240 litre bins, if they generate more green waste, recycling or garbage per fortnight (or at peak times) than the average household.

Average households in single dwelling houses can be expected to generate volumes of waste as follows in Table 6.

**Table 6 - Waste generated by standard houses with gardens**

Standard house with garden			
Waste Type	Volume Litres/week	Volume L/fortnight	Collection frequency
Recycling	120 – 180	240 - 360	Fortnightly
Green waste (food and garden wastes)	240	480	Weekly *
Residual garbage	120	240	Fortnightly *

Food collected weekly in green waste bin and garbage bin collected fortnightly.

#### **Kerbside collectable bulk waste**

In Lake Macquarie City, furniture, mattresses, whitegoods, electronic waste (e-waste), some tree pruning and other large domestic wastes can be collected from the kerbside through bulk waste collection services.

#### **Problem waste**

Problem wastes (such as batteries, light globes, paint, chemicals, gas bottles and electronic waste) can be dropped off at collection points around Lake Macquarie. Medical sharps can also be taken to sharps bins around Lake Macquarie City Council. More information on this is available on Lake Macquarie City Council's website [www.lakemac.com.au](http://www.lakemac.com.au).

### 2.3.2 Design to avoid, reuse and recycle operational wastes

Ensuring that there is sufficient space and ease of access to recycling and green waste bins helps to maximise the diversion of recyclable and compostable wastes from the residual garbage bin. Indoor waste cupboards should have sufficient room for separating a diversity of wastes including items that should not be included in any of the kerbside bins, such as batteries and oils, or that are separately recyclable such as plastic wrap and printer cartridges. Bins should be co-located to so that no extra effort is required to take wastes to the recycling or green waste bins.

Space for on-site composting or worm farming should still be available so that residents can create and use their own organic fertilisers for yard gardens, balcony gardening and indoor plants.

### 2.3.3 Services for waste removal from single dwelling houses

**Single dwelling houses** – including:

- housing on small and narrow lots; and
- dwelling houses in Rural and Environment Protection Zones (see also *State Environmental Planning Policy (SEPP) (Exempt and Complying Development Codes) 2008* Schedule 6).

The majority of Lake Macquarie City Council area has access to domestic kerbside collection services. The exceptions are a few remote rural properties that do not have public road frontage, or a few properties that in the past were not designed in a way that would allow for waste collection by Council waste services.



There are three waste streams collected by Council in kerbside bins. Recyclables like glass and plastic containers and paper and cardboard are collected through the yellow- lid bin. Food and garden waste is collected through the lime green-lid bin. Residual garbage is collected through a third bin that typically has a red-lid. Council also offers kerbside bulk waste collections for furniture, whitegoods, metals, electronic waste, mattresses and bundled garden waste.

Single dwelling houses that pay a waste service charge with their rates receive:

- 1 x standard 240 litre mobile garbage bin collection each fortnight (bins purchased by property owner);
- 1 x standard 240 litre or 360 litre mobile recycling bin collection each fortnight (bins provided by Council);
- 1 x standard 240 litre mobile green waste bin collection each week (bins provided by Council);
- bulk waste collections (furniture, electrical, mattresses and tree branches) up to two cubic metres (one box trailer load) of combined waste material, per household per collection; and
- household problem waste recycling and disposal services from drop off points around Lake Macquarie.

Property owners may opt to receive additional garbage, recycling and green waste services by paying an additional charge. However, adequate space within the property boundary is required to store additional bins.

Household waste that does not belong in kerbside bins can be disposed of for free through a range of drop off locations. These include Council's Community Recycling Centre at the Awaba Waste Management Facility, community recycling stations in Council libraries, two Chemical CleanOut days each year and at local businesses that offer product takeback initiatives (such as printer cartridge, battery and e-waste recycling).

Council works with local companies to provide specialised waste disposal and recycling services for the following items and household problem wastes, most of which can be handed in at the Awaba Waste Management Facility:

- whitegoods and metals;
- mattresses;
- e-waste (anything with a plug, also DVDs and CDs discs only, no cases);
- mobile phones;
- batteries;
- light globes;
- paint and chemicals;
- motor oil;
- gas cylinders;
- smoke detectors;
- sharps; and
- asbestos.

Residents with access to vehicles can take their excess general, bulk and green waste to the Awaba Waste Management Facility and pay a fee for it to be separated and safely disposed of either through recycling, or in landfill, or composting through an organics recovery facility.

Information on these services and other waste drop off locations around Lake Macquarie City, are available on the Lake Macquarie City Council's website [www.lakemac.com.au](http://www.lakemac.com.au).

Private waste services can be contracted to provide services. However a design that does not allow residents the choice to access Council services is restrictive and imposes extra ongoing waste costs on the residents.

There are second-hand, scrap merchant and recycling businesses around Lake Macquarie that accept reusable and recyclable wastes. There are also businesses that accept wastes such as used printer cartridges and plastic film/bags, which they then send on to recyclers. If there is storage space provided for residents to separate and collect these wastes, they can then take them to be recycled.

Home composting can take the form of compost bins, buried tubes, tumblers, worm farms, mulching and Bokashi buckets.



Figure 2 - 240 litre mobile bins awaiting kerbside collection

### 2.3.4 Waste storage area

Each dwelling should be provided with an area capable of storing, at minimum, the three standard mobile waste bins. Table 7 shows the standard bin dimensions.

Table 7 - Bin dimensions for standard mobile bins

Bin dimensions for standard mobile bins			
Size (litres)	Height (mm)	Width (mm)	Depth (mm)
240	1060	585	730
360 (recycling only)	1100	680	848

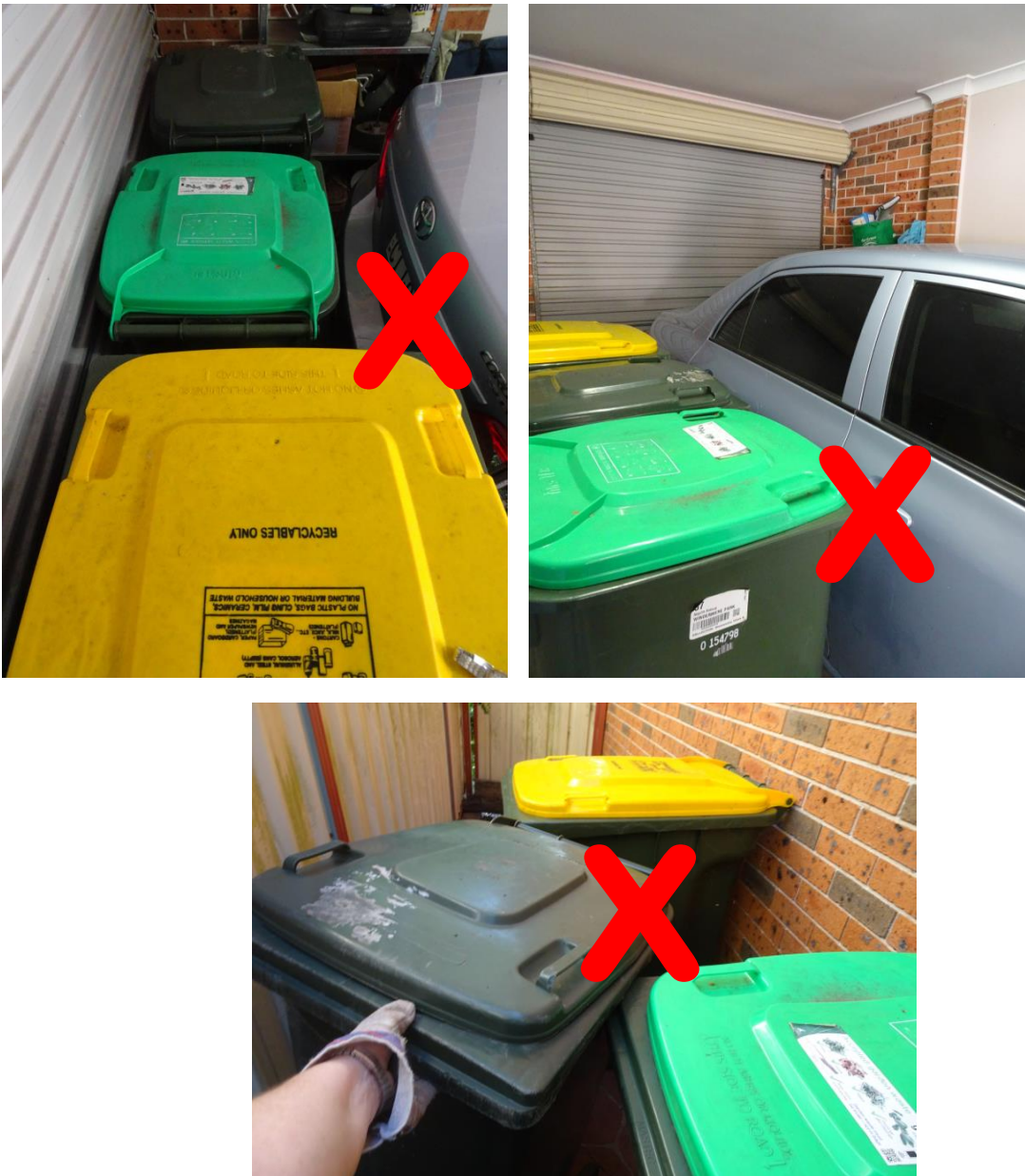
Bins should be kept in shaded and well-ventilated locations that are not within three metres of doors, air intakes and open windows for the dwelling or neighbouring premises. The bin storage area should be at the rear of the premises to avoid visual clutter from the street. Alternatively, bins may be kept in a screened side yard or within an enlarged garage or carport. If the only solution is for bins to be stored in the front yard then the bins should be appropriately screened and able to be secured to prevent non-occupants from dumping waste into the bins or the bins being stolen.

If the bins are to be kept within the garage then the allocated space needs to be in addition to the space required for a standard single or double garage, not as part of that standard dimension. The garage needs to be at least the minimum standard garage dimensions (single garage 3.0 x 5.4 metres; double garage 5.4 x 5.4 metres), plus at least the width or depth of the largest waste bin (sufficiently wide to accommodate at least three bins of the 240 litre size (585mm wide x 730mm depth per bin). If a 360 litre recycling bin is to be accommodated, then the plan dimensions are 680 x 848 mm. The options for layouts to fit and access bins and cars in garages are shown in Appendix 3.

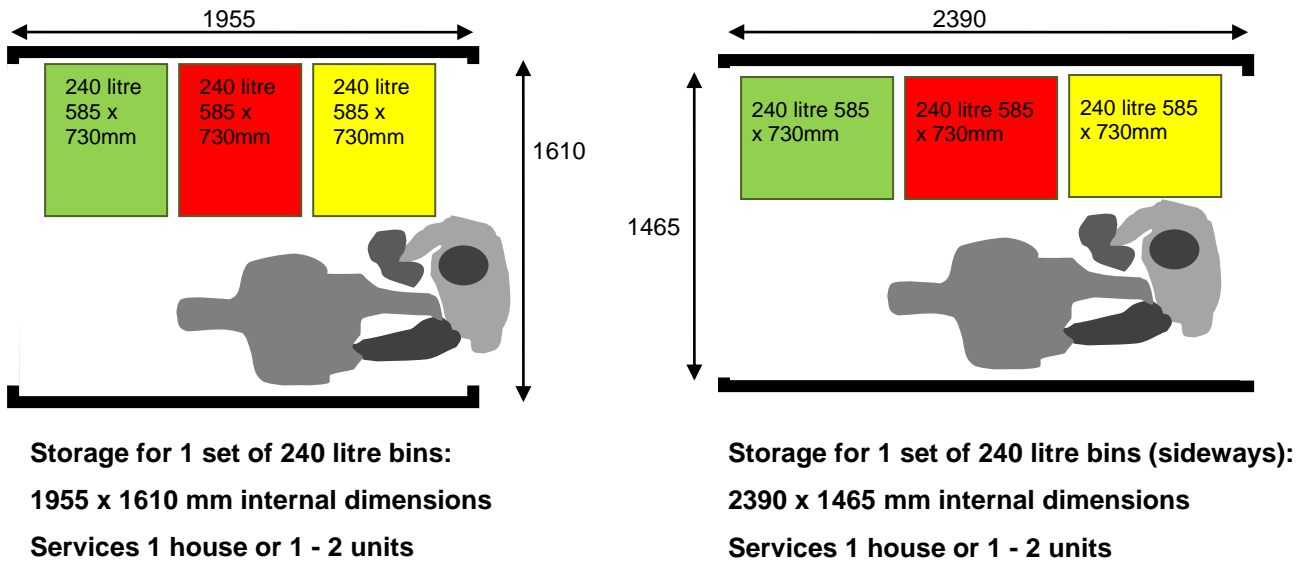
Extra room needs be allocated to keep bins in garages so vehicles fit in and drivers/passengers can get out.

Adaptable dwelling residents need to be able to access bins in a wheelchair and move bins out without moving the car.

Side and backyard spaces need to be wide enough so that residents are able to access all three bins to place waste in them without moving the bins and can easily move the bins to the collection point without having to shuffle all three bins around. Figure 3 shows why and Figure 4 shows required access dimensions for bins.



**Figure 3 - Examples of improper bin configuration**



**Figure 4 - Sample diagrams of bin storage areas**

If bins are to be kept under stairs (for example in the garage or backyard), then occupants need to be able to open the lids fully to place waste inside the bins without having to move the bins out. This requires the minimum storage space height to be 1800mm where every bin will be placed.



**Figure 5 - Storage of bins under stairs**

In this example above (in Figure 5), the design has 4400 mm horizontal space under the stairs and 2360 mm rise from one floor to the next with an additional 180 mm step down to garage, and is intending to store 3 x 240 litre bins width-wise under the stairs (which require a space 1955 mm long x 1800mm high). In this case, there is insufficient space to open lid of third bin. The occupant would be forced to pull the garbage bin out every time to open the lid to put waste in the bin. This is discouraged in all developments, and particularly an issue if in an accessible house.

In this case, the design needs to:

- shift space for 240 litre bins to the right by 615mm,
- drop the floor of garage down by 400mm;
- if in a strata development, specify 140 litre bins (which require a space 1530mm high); or
- store the bins elsewhere.

### 2.3.5 Collection point

For most properties, the bins should be placed on the kerb of the public road at the front of the property. Each week two bins are placed, at a spacing of at least one metre centres with at least a 300mm gap between bins. The gap is needed to ensure quick collection by the side lift trucks that grip the sides of the bins to lift and empty them. For battle-axe blocks, one bin can be placed on the kerb either side of the driveway. Appendix 4 provides information and minimum kerb space requirements for bin spacing to enable kerbside collection.

Alternative collection points can be discussed with Council if there is no space on the kerb that can be provided that is:

- flat enough for bins to stay upright when placed back down by the waste collection vehicle;
- unobstructed by overhead signs or tree canopies, or too close to retaining wall or fences;
- obstructed most of the time by parked vehicles;
- away from intersections and other places where waste collection vehicles cannot safely stop; and
- accessible from the bin storage area (for example a public road back lane may be closer to the bin storage area rather than the main street in front of the property).

Bins should not be placed in gutters as this obstructs stormwater run-off.



**Figure 6 - Example of residential kerbside presentation**

### 2.3.6 Access from waste storage area to collection point

The bin storage area should have unobstructed access to Council's agreed collection point, which is normally the kerbside in front of the property. This means:

- the bin carting route to place the bin out for collection must not necessitate passing through occupied areas of the house (however passing through the garage or courtyards is acceptable);
- there must be no steps or doorway thresholds over which bins have to pass;
- the distance from storage area to collection point should (where possible) be less than 75 metres (50 metres for aged persons or persons with a disability);
- residents should not have to walk the bins around the street block to present the bins;
- the gradient should be less than 1:14 where possible; and
- any gate or doorway needs to be wider than 680mm to allow a 360 litre recycling bin through.

### 2.3.7 Access from dwelling to waste storage area

Bins should be within ten metres of an access door from the dwelling so that waste can be taken out. At least one external light should light the way. Steps are acceptable, except when the dwelling is an adaptable one, which needs to be wheelchair accessible.

For adaptable dwellings, there needs to be room for a wheelchair to access the front of all the bins to place waste in the bins and this must not require a vehicle to be moved out of the garage to access the bins.

### 2.3.8 Waste cupboard

It is widely recognised that the best way to ensure good waste management is to separate garbage, recyclable and reusable materials at the source.

As the source of most waste in the household is the kitchen, it is appropriate for facilities to be available for the source separation of garbage, recyclable and compostable materials. This can easily be accomplished through provision of a waste cupboard. The waste cupboard, or other storage area within the dwelling (most likely located in the kitchen), should be of sufficient size to hold a single day's waste in separated bins or caddies. This cupboard is often located in the space below the kitchen sink.

### 2.3.9 Waste plan information for handover to occupants

A waste system information guide should be provided to owners, occupants and property managers and handed on to new owners, managers and occupants. The guide should outline:

- the approved waste service system and how to use it;
- approved locations for bin storage;
- options within the approval for alternative waste service solutions; and
- wording to be included in tenancy agreements about the waste management system.

A property plan should be included to show the locations of:

- waste cupboards;
- waste storage area(s); and
- waste collection point(s).