Lake Macquarie

LAKE MACQUARIE CITY

Development Control Guidelines

Operational Waste Management – for Commercial and Retail, Recreation and Tourism Facilities

4 Operational Waste Management – for Commercial and Retail, Recreation and Tourism Facilities

The commercial, retail, recreation and tourism facilities section covers:

- commercial and retail components of a mixed-use development;
- office premises, business premises, banks, post offices, hairdressers, funeral homes, registered clubs;
- retail, industrial retail outlet and wholesale supplies premises;
- bed and breakfast / farm stay accommodation;
- caravan parks (including camping grounds) and manufactured home estates;
- child care centres;
- foreshore and waterway development (commercial waterfront / jetties);
- health consulting rooms;
- places of public worship;
- service stations and highway service centres;
- sex service premises;
- signage;
- tourist and visitor accommodation (including hotels, motels, backpackers accommodation, serviced apartments and other tourist and visitor accommodation);
- veterinary hospitals;
- public and private recreation;
- amusement and functions centres and entertainment facilities; and
- aged care facilities.

See Section 5 for industries, mining, vehicle repair workshops, storage, depots, infrastructure, aquaculture, boat building and workshops, intensive agriculture and waste management or resource recovery facilities.

4.1 Operational Waste Management Plan for Commercial Developments

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

4.1.1 What needs to be included in the operational waste management plan

The WMP identifies the types of waste that the development 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 that is relevant to the proposed development type – one of:
    - commercial and retail components of a mixed-use development, office premises, business premises, banks, post offices, hairdressers, funeral homes, registered clubs, retail, industrial retail outlet and wholesale supplies premises;
    - bed and breakfast / farm stay accommodation, caravan parks (including camping grounds) and manufactured home estates; places of public worship; tourist and visitor accommodation (including hotels, motels, backpackers accommodation, serviced apartments and other tourist and visitor accommodation);
    - health consulting rooms; sex service premises; veterinary hospitals; aged care facilities;
    - child care centres; foreshore and waterway development (commercial waterfront / jetties);service stations and highway service centres;
    - public and private recreation; amusement and functions centres and entertainment facilities; or
    - signage.
2. completed Operational WMP form;
3. design and/or landscape floor plan drawings (drawn to scale) showing:
    - all bins, facilities and areas to be used for on-site waste storage and collection; and
    - features of waste carting routes including door/gate widths, no steps, gradients and distances between waste storage and collection points;

    where waste collection will take place on site, drawings showing:
    - access roads/driveways, vehicle turning circles, pavement strength, collections points free from obstructions beside or above where bins will be emptied; and
4. an updated copy of the waste management system information guide that will be provided to occupants and property managers

4.1.2 How to prepare the operational waste management plan

Sections 4.1.3 – 4.1.8 provides an Operational Waste Management Checklist for each type of commercial development covered in Parts 2-7 and 9 of the DCP and Section 4 of the WMG. Choose the checklist that is relevant to your type of development and complete it as thoroughly as possible.

Sections 6.2.9 provides the WMP form to use for commercial developments. Complete it as thoroughly as possible.

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

Applicants must prepare design and/or landscape drawings that confirm the development's compliance with the controls and guidance to meet operational controls in the DCP and WMG, as prompted by the Operational Waste Management Checklists and WMP form.

After designing the waste management system, prepare a summary document to provide owners, property managers and occupants with an explanation on how to use the system to deliver optimal waste management outcomes. Topics to cover include proposed numbers and sizes of bins, waste storage locations and rules,

collection frequencies, bin carting responsibilities, collection point locations and whether Council or a private waste collection provider will service the development.

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 (see sections 4.3.1 for help)
2. Design and identify ways to avoid, reuse and recycle wastes (see section 4.3.5 for help):
3. Identify and list:
    a. waste management equipment, bin sizes, numbers of bins, collection frequencies and waste collection provider(s) that can provide the above materials and services (see sections 4.3.4, 4.3.6 and 4.3.9 for help); and
    b. waste destinations, recyclers, composters and landfills (see the Lake Macquarie Recycling Directory at https://www.lakemac.com.au/waste/other-household-waste for help).
4. Design:
    a. waste storage areas (see sections 4.3.7, 4.3.10-4.3.15 for help);
    b. bin collection points, if waste collection is not direct from the storage area (see sections 4.3.17 – 4.3.21 for help);
    c. routes between waste storage and collection points (see section 4.3.16 for help);
    d. routes between units and waste storage areas (see section 4.3.15 for help); and
    e. one to two days' waste storage in units (see section 4.3.11 – 4.3.13 for help);
5. Collate waste system information guide to be provided to owners, property management and occupants(see section 4.3.22 for help).

4.1.3 Checklist for typical commercial and retail developments

Use the following waste management checklist for:

- office-based and business premises;
- retail businesses;
- the commercial and retail components of a mixed-use development;. and
- Post offices, hairdressers, funeral homes, registered clubs, industrial retail outlets and wholesale supplies premises.

See section 4.2 – 4.2.3 and 4.2.14 for more information.

Do not use this checklist if the proposed commercial development is classified:

- home business or home industry located in a single or multi-unit dwelling (use the Checklist in Section 2.2 instead)
- industrial use (see WMG Section 5 and the Checklist in section 5.2 instead)
- one of the following specific land use developments with additional controls under Part 9 of the DCP and Section 4 of the WMG (see the introduction to WMG section 4.2 and sections 4.2.4 – 4.2.18 for important information about these developments):

• Bed and breakfast / farm stay accommodation	• Child care centres	• Veterinary Hospitals
• Tourist and visitor accommodation	• Aged care facilities	• Places of public worship
• Caravan parks and manufactured home estates	• Health consulting rooms	• Service stations
• Foreshore and waterway development	• Sex service premises	• Signage
• Public and private recreation	• Amusement and function centres, entertainment facilities	

Checklist – Operational Waste Management for Commercial and Retail Developments
Summary of Multiple Dwelling Developments Application
Site Address and Lot/Plan(s):
Summary of property use(s) **(type of business, office, retail shop, etc.)** **List main types of operational wastes that will be generated**

Applicant Information
Applicant's Name:
Applicant's Address:
Applicant's Phone / Mobile:
Applicant's Email:
Applicant's Authorisation: 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. **Signature of Applicant or Authorised Agent:** **Date:**

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, bulky cardboard) can be effectively managed.				

Avoidance, Reuse and Recycling				
Waste management solutions are an integral part of the design and operation.				
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 can access a range of waste services.				

Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and businesses				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the businesses.				

Waste Storage Areas (continued)	**YES**	**NOT YET**	**NO**	**N/A**
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are 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.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste (i.e. furniture).				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold one days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				
Additional Guidance on Controls applicable to most office and retail premises (refer to WMG sections 4.2.14 list of affected business types)				
Waste storage space is provided within each premise that is sufficiently sized to hold one days' volume of waste in separated containers to enable separation of recyclables (like glass, plastic containers, paper), food waste, soft plastic, problem waste (such as batteries, light globes, cooking oils and paint) and residual garbage. This requirement does not apply to bulky waste items like cardboard boxes when a waste storage area outside of the premises is available.				
Waste storage area(s) is in a room of the building, courtyard, caged back of house area, or secured area that is screened from: public roads, views from neighbours, main living spaces of neighbouring dwellings, neighbouring business entrances and the main entrance of the business itself. Screening will not rely on the growth of plants but they may supplement it.				
The following requirement only applies to retail businesses where food and drink will be sold as takeaway items, including from supermarkets, kiosks and permanent markets (but not including bottle shops and cellar doors): A pair of garbage and recycling public-use bins will be installed in a suitable kerbside location outside the shop, or within 75 metres of the main entrance and be maintained by the applicant premises. Public-use bins may be secured within the premises waste storage area for safekeeping outside of business hours if operationally appropriate. This requirement does not apply where public garbage and recycling bins exist within 75 metres, or a streetscape plan indicating public-use bins will be installed, or Council agrees to waive this requirement.				

Route from Business to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between the business(es), buildings and public area bins and the waste storage area(s).				
Safe, lit access from the door of the business(es) to the waste storage area is less than 100 metres in length.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				

Waste Collection and Removal	YES	NOT YET	NO	N/A
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by 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.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
Bins out for collection are not placed in front of adjacent business premises during peak operating hours of the adjacent premises and only outside of that period if agreed to by the occupants and management of the adjacent business, nor placed in front of neighbouring residential properties, unless agreed to by the owner and occupants of the dwelling(s).				
No more than 40 bins up to 360 litre size are placed out at any one kerbside location in relation to a single development				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
All bins larger than 360 litres will be collected from a designated on-site location.				
Where bins will be collected on site, the waste collection vehicle route, turn space, swept paths and clearances are shown on scaled plans demonstrating that waste collection vehicles typically servicing the area can safely manoeuvre around the site. (*The minimum space required is for 8 metre long rear lift trucks, but Council's preference is space for at least a 10 metre long side lift truck.)*				
Where internal roads cannot cater for a Council 10 metre length side lift waste collection vehicle, then a letter is provided from a private waste service provider stating how they can provide the on-site waste collection service.				
Where bins will be collected on site, the on-site road access meets pavement quality standards to handle waste collection vehicle gross weights.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: 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 bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than 100 metres in length for commercial developments.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
All Waste Management Plans will be provided to any relevant person involved in the operational use of the development, including building owners, building managers and occupants.				

Operational Waste Management Plan – Commercial Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Plan Checklist and coversheet has been completed and signed				

4.1.4 Checklist for bed and breakfast, caravan parks, places of worship, tourist accommodation

Use the following WMP checklist for bed and breakfasts, farm stays, caravan parks and manufactured home estates, places of public worship and tourist and visitor accommodation.

The general objectives, controls and guidance to meet operational controls set for all commercial / retail development apply to these developments, however specific land use controls under Part 9 of the DCP and Section 4 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 4.2, 4.2.1, 4.2.3 or the DCP. For guidance, refer to the WMG section listed below:

- Bed and breakfast and farm stay accommodation (4.2.4)
- Caravan parks and manufactured home estates – includes camping grounds (4.2.5)
- Places of public worship (4.2.9)
- Tourist and visitor accommodation – includes hotels, motels, backpackers accommodation, serviced apartments (4.2.3)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Commercial and Retail Development: Bed and Breakfast, Caravan Parks, Places of Worship, Tourist Accommodation

Summary of Multiple Dwelling Developments Application

Site Address and Lot/Plan(s):

Applicant Information

Applicant's Name:

Applicant's Address:

Applicant's Phone / Mobile:

Applicant's Email:

Applicant's Authorisation:

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.

Signature of Applicant or Authorised Agent: **Date:**

Summary of property use(s) **(e.g. bed and breakfast, farm stay, type of tourist and visitor accommodation, caravan park or manufactured home estate)** **List main types of operational wastes that will be generated**

Waste Types	**YES**	**NOT YET**	**NO**	**N/A**
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, bulky cardboard) can be effectively managed.				
Places of Public Worship – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Wastes from the place of public worship (commercial waste) will be managed separately from any residences on the property.				
Waste volumes estimated for the place of public worship include capacity to handle peak volumes during events with high attendance and waste generation.				

Avoidance, Reuse and Recycling	**YES**	**NOT YET**	**NO**	**N/A**
Waste management solutions are an integral part of the design and operation.				
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 can access a range of waste services.				
Bed and Breakfast / Farm Stay – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The development provides waste management amenities to guests that will maximise diversion of waste from landfill to recycling and composting.				
Caravan Parks and Manufactured Home Estates – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The waste system design allows opportunities for all occupants to access recycling and green waste services that are equal to (or better than) those available through Council to all Lake Macquarie residents.				

Waste Storage Areas	**YES**	**NOT YET**	**NO**	**N/A**
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and premises				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the premises.				

Waste Storage Areas (continued)	**YES**	**NOT YET**	**NO**	**N/A**
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are 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.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste (i.e. furniture).				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold one days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				
Bed and Breakfast / Farm Stay – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
All guest accommodation has space to store 2 days' waste separated into recycling, food waste, problem waste (e.g. batteries, cooking oils) and garbage.				
The waste storage area(s) accessible to guests are large enough to hold a fortnight's volume of recycling and residual garbage and week's volume of food waste based on the waste generation rates in Tables 13 and 14.				
Caravan Parks and Manufactured Home Estates – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste storage areas accessible to occupants and visitors provide at least one set of co-located garbage, recycling and green/food waste bins per waste station.				
At least one waste storage area is capable of storing problem wastes that cannot be collected in waste bins such as batteries, gas bottles, paints, oils, liquid wastes and chemical wastes and bulk waste (such as furniture and appliances).				
Space for storage is allocated and indicated on plans for any waste management equipment (such as Utes, bin carts and compactors).				
Tourist and Visitor Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
For development containing fifty units or greater a development master plan has been prepared and submitted with the development application to identify on-site infrastructure and systems, including waste management and the proposed maintenance of those systems.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Waste storage space is accessible to all guests within their accommodation that is sufficiently sized to enable separate storage of garbage, recycling and food waste for a minimum of two days.				
The development's waste storage area(s) is large enough to hold sufficient numbers of full and spare garbage, recycling and food waste bins during peak period use of the facility, that match the waste collection frequencies identified in the Operational Waste Management Plan. Waste storage areas, numbers of bins and waste collection frequencies have been determined by calculating projected waste generation rates provided in Table 14.				
Garden and food waste that is processed on site (with compost, worm farm or other processing solution) for use on site in gardens, meets EPA Resource Recovery Order criteria.				
Waste storage areas include space to store other wastes that can be recycled separately, or that need to be managed separately from normal waste collection services such as problem wastes (e.g. batteries, gas bottles, paints, oils, liquid and chemical wastes), e-wastes and bulk waste (such as furniture and appliances).				
Odour and noise from waste management activities are mitigated to ensure guests using the accommodation and facilities are not negatively affected.				

Route from Buildings to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients 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 door of the premises to the waste storage area is less than 100 metres in length.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				
Bed and Breakfast / Farm Stay – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The route is less than 75 metres and is safe and lit.				
Caravan Parks and Manufactured Home Estates – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The following is shown on scaled plans submitted with the development application for operational use: waste carting route(s) around the park/estate to waste storage area(s) (whether by Ute, wheeling bins or other means).				
The caravan park or manufactured home estate has safe, lit access from dwelling to allocated waste storage area that is less than 75 metres in length, or 50 metres in length for adaptable housing and seniors' developments.				

Waste Collection and Removal	**YES**	**NOT YET**	**NO**	**N/A**
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by 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.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
Bins out for collection are not placed in front of adjacent premises during peak operating hours of the adjacent premises and only outside of that period if agreed to by the occupants and management of the adjacent premises, nor placed in front of neighbouring residential properties, unless agreed to by the owner and occupants of the dwelling(s).				
No more than 40 bins up to 360 litre size are placed out at any one kerbside location in relation to a single development				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
All bins larger than 360 litres will be collected from a designated on-site location.				
Where bins will be collected on site, the waste collection vehicle route, turn space, swept paths and clearances are shown on scaled plans demonstrating that waste collection vehicles typically servicing the area can safely manoeuvre around the site. (*The minimum space required is for 8 metre long rear lift trucks, but Council's preference is space for at least a 10 metre long side lift truck.)*				
Where internal roads cannot cater for a Council 10 metre length side lift waste collection vehicle, then a letter is provided from a private waste service provider stating how they can provide the on-site waste collection service.				
Where bins will be collected on site, the on-site road access meets pavement quality standards to handle waste collection vehicle gross weights.				
Caravan Parks and Manufactured Home Estates – Only	**YES**	**NOT YET**	**NO**	**N/A**
Where there is collection of waste in bins of 660 litre size or larger, the bin collection point is on site and accessible by service vehicles with minimal reversing.				
Waste collection on site will not block on-site car parking, nor access and egress from the property driveway.				
Measures are implemented to mitigate the impacts of odour and noise associated with the movement of waste.				

Waste Collection and Removal (continued)	YES	NOT YET	NO	N/A
Places of Public Worship – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste collection vehicles can enter and leave the site in a forward direction.				
Special attention is given to where waste collection points are located and when collections will take place. Safety measures are in place to separate the movements of waste collection vehicles from those of pedestrians and motorists in around the development.				
Tourist and Visitor Accommodation – Only	**YES**	**NOT YET**	**NO**	**N/A**
Where guests need to transfer waste within their accommodation's waste bin storage area(s), a safe access route from the accommodation to the external waste bin storage area(s) is: shown on the design plan, well-lit, on an even path and no more than 75 metres from the accommodation.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: 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 bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than 100 metres in length for commercial developments.				
Tourist and Visitor Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Where guests need to transfer waste within their accommodation's waste bin storage area(s), a safe access route from the accommodation to the external waste bin storage area(s) is: shown on the design plan, well-lit, on an even path and no more than 75 metres from the accommodation.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
All Waste Management Plans will be provided to any relevant person involved in the operational use of the development, including building owners, building managers and occupants.				
Caravan Parks and Manufactured Home Estates – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Responsibility for the transfer, collection and disposal of recyclables, compostable wastes and residual garbage must be planned during the project's design stage. The development proposal outlines these arrangements in the Operational Waste Management Plan and/or waste management information guide.				
A copy of the waste management information guide that will be provided to property owners, caravan and manufactured home owners, property managers and occupants is included in the development application.				
Tourist and Visitor Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
For development containing fifty units or greater a development master plan has been provided with the development application that identifies continuing coordinated emphasis on environment protection training for staff.				

Operational Waste Management Checklist Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Plan Checklist and coversheet has been completed and signed				

4.1.5 Checklist for health consulting rooms, sex service premises, veterinary hospitals, aged care facilities

Use the following WMP checklist for health consulting rooms, sex service premises, veterinary hospitals and aged care facilities.

The general objectives, controls and guidance to meet operational controls set for all commercial / retail development apply to these developments, however specific land use controls under Part 9 of the DCP and Section 4 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 4.2, 4.2.2, 4.2.3or the DCP. For guidance, refer to the WMG section listed below:

- Health consulting rooms (4.2.8)
- Sex service premises (4.2.11)
- Veterinary Hospitals (4.2.15)
- Aged care facilities (4.2.18)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Commercial and Retail Development: Health Consulting Rooms, Sex Service Premises, Veterinary Hospitals and Aged Care Facilities
Summary of Application
Site Address and Lot/Plan(s):
Summary of property use(s): **List main types of operational wastes that will be generated:**

Applicant Information
Applicant's Name:
Applicant's Address:
Applicant's Phone / Mobile:
Applicant's Email:
Applicant's Authorisation: 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. **Signature of Applicant or Authorised Agent:** **Date:**

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, bulky cardboard) can be effectively managed.				

Avoidance, Reuse and Recycling	YES	NOT YET	NO	N/A
Waste management solutions are an integral part of the design and operation.				
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 can access a range of waste services.				
Sex Service Premises – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
A sufficient number of appropriately located hygienic sanitary, clinical and sharps receptacles are provided for workers and customers.				
Specialised waste collectors will collect and lawfully dispose of hygienic sanitary, clinical and sharps waste.				

Waste Storage Areas	**YES**	**NOT YET**	**NO**	**N/A**
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and premises				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the premises.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are 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.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste (i.e. furniture).				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold one days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				
Health Consulting Rooms – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste storage room(s) have sufficient space for secure storage of separated segregated waste types including clinical waste, chemical waste, radioactive waste, cytotoxic wastes, recyclables, organic (compostable garden and food) waste and general waste, in accordance with NSW Department of Health *Waste Management Guidelines for Health Care Facilities*. This also includes space for trolley storage if required for managing wastes.				
Waste storage is able to be secured from unauthorised access.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Veterinary Hospitals – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Clinical wastes, cytotoxic waste, pharmaceutical and medicine wastes, sharps, body parts, dead animals and non-sterilisable items contaminated with contagious or zoonotic pathogens (such as contaminated gloves, eyewear, mask, gown, head cover, earplugs and other personal protective equipment) can be separated into containers or suitable bags, clearly labelled and separately stored in the waste storage area(s) to comply with Part 11 (Clause 113) of the *Protection of the Environment Operations (Waste) Regulation 2014* requirements for the storage of clinical waste.				
Waste storage areas are designed to prevent access by rodents and insects with potential as disease vectors				
Waste storage is able to be secured from unauthorised access.				
Aged Care Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Clinical wastes, cytotoxic waste, pharmaceutical and medical wastes, sharps and non-sterilisable items contaminated with blood or other body fluids (such as contaminated gloves, eyewear, mask, gown, head cover, earplugs and other personal protective equipment) can be separated into containers or suitable bags, clearly labelled and separately stored in the waste storage area(s) to comply with Part 11 (Clause 113) of the *Protection of the Environment Operations (Waste) Regulation 2014* requirements for the storage of clinical waste.				
Internal design, including in resident's rooms, allows for the option of waste storage for one days' worth of separated recycling, food and residual garbage, unless waste is to be disposed of to waste bins elsewhere in the premises more frequently.				
Space is provided in waste storage areas to separately collect recyclable and compostable wastes from residual garbage with sufficient capacity to maximise recycling and composting.				
The waste storage areas are lit.				
Waste storage area(s) is secured from unauthorised access.				

Route from Buildings to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients 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 door of the premises to the waste storage area is less than 100 metres in length.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				
Aged Care Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The route to place waste in external bins is less than 50 metres, safe and lit.				

Waste Collection and Removal	**YES**	**NOT YET**	**NO**	**N/A**
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by 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.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
Bins out for collection are not placed in front of adjacent premises during peak operating hours of the adjacent premises and only outside of that period if agreed to by the occupants and management of the adjacent premises, nor placed in front of neighbouring residential properties, unless agreed to by the owner and occupants of the dwelling(s).				
No more than 40 bins up to 360 litre size are placed out at any one kerbside location in relation to a single development				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
All bins larger than 360 litres will be collected from a designated on-site location.				
Where bins will be collected on site, the waste collection vehicle route, turn space, swept paths and clearances are shown on scaled plans demonstrating that waste collection vehicles typically servicing the area can safely manoeuvre around the site. (*The minimum space required is for 8 metre long rear lift trucks, but Council's preference is space for at least a 10 metre long side lift truck.)*				
Where internal roads cannot cater for a Council 10 metre length side lift waste collection vehicle, then a letter is provided from a private waste service provider stating how they can provide the on-site waste collection service.				
Where bins will be collected on site, the on-site road access meets pavement quality standards to handle waste collection vehicle gross weights.				
Health Consulting Rooms – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Collection and disposal of any clinical, pharmaceutical, sharps, chemical and (if any) cytotoxic and radioactive waste generated will be undertaken by a waste collector licensed by the Environmental Protection Authority for this activity.				
Veterinary Hospitals – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Clinical and related wastes, sharps and dead animals will be collected by a licenced waste transporter and taken to a licenced waste processor as per Part 11 of the *Protection of the Environment Operations (Waste) Regulation 2014* for requirements relating to the transport and disposal of clinical waste.				

Waste Collection and Removal (continued)	YES	NOT YET	NO	N/A
Disposal of dead animals will comply with the guidelines set out in AUSVETPLAN – Operational Manual: Disposal (Animal Health Australia 2015 or latest updated version) and by Wildlife Health Australia for Australian animals. Chilled storage options have been considered if animals or animal parts will not be removed from the premises promptly. Dead animals and parts will not be left lying around, buried or cremated on site and will be taken to a licensed waste treatment facility, pet cemetery or crematorium for proper disposal.				
Aged Care Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Clinical and related wastes, sharps and medical waste is collected by a licenced waste transporter and taken to a licenced waste processor in accordance with the handling and transportation requirements in Part 11 of the *Protection of the Environment Operations (Waste) Regulation 2014* relating to the transport and disposal of clinical waste.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: 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 bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than 100 metres in length for commercial developments.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
All Waste Management Plans will be provided to any relevant person involved in the operational use of the development, including building owners, building managers and occupants.				
Veterinary Hospitals – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The waste information guide contains sufficient information so that the occupants will be able to meet the waste management plan requirements under Part 11 Clause 113 (3) of the *Protection of the Environment Operations (Waste) Regulation 2014*.				
Aged Care Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste management information is provided to staff and contractors, including kitchen staff, carers, nurses and cleaners. Information on how to separate wastes and safely operate waste related equipment is displayed above the bins in the waste storage room as well as on the bins.				
Bins used by for residents and visitors are clearly marked with information on which wastes can be included in which bins				

Operational Waste Management Checklist Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Plan Checklist and coversheet has been completed and signed				

4.1.6 Checklist for child care centres, foreshore and waterway development, service stations

Use the following WMP checklist for child care centres, foreshore and waterway development, service stations.

The general objectives, controls and guidance to meet operational controls set for all commercial / retail development apply to these developments, however specific land use controls under Part 9 of the DCP and Section 4 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 4.2, 4.2.2, 4.2.3or the DCP. For guidance, refer to the WMG section listed below:

- Child care centres (4.2.6)
- Foreshore and waterway development (4.2.7)
- Service stations – includes highway service centres (4.2.10)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Commercial and Retail Development: Child care centres, Foreshore and waterways, Service stations
Summary of Application
Site Address and Lot/Plan(s):
Summary of property use(s): **List main types of operational wastes that will be generated:**

Applicant Information
Applicant's Name:
Applicant's Address:
Applicant's Phone / Mobile:
Applicant's Email:
Applicant's Authorisation: 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. **Signature of Applicant or Authorised Agent:** **Date:**

Waste Types	**YES**	**NOT YET**	**NO**	**N/A**
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, bulky cardboard) can be effectively managed.				
Foreshore and Waterway Developments – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Recyclable and problem waste (such as batteries, cooking oils and paint), which may be from boats or foreshore users, is separated managed separately.				
Service Stations – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The Operational WMP identifies problem wastes and how these will be managed and correctly disposed or (where appropriate) recycled. Wastes considered include (from vehicles) batteries, motor oil, tyres, car parts, chemicals, electrical wastes and light globes; facility maintenance wastes including hygienic sanitary, nappy and medical sharps wastes from restrooms.				

Avoidance, Reuse and Recycling	**YES**	**NOT YET**	**NO**	**N/A**
Waste management solutions are an integral part of the design and operation.				
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 can access a range of waste services.				
Child Care Centres – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Alternatives to disposal to landfill of nappies have been considered.				
Foreshore and Waterway Developments – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The foreshore facilities will maximise opportunity for recycling (containers), other recyclables and food/green waste to be collected separately from garbage.				
Pollution risk to waterways or foreshore from hazardous/liquid wastes is avoided.				

Waste Storage Areas	**YES**	**NOT YET**	**NO**	**N/A**
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and premises				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the premises.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are 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.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste (i.e. furniture).				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold one days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Child Care Centres – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Internal design allows for waste storage for one days' worth of separated recycling, food and residual garbage, or waste is disposed of to waste bins elsewhere in the premises more frequently.				
Waste storage areas inside the building and externally accessed are securable.				
Where educational compost and worm farms are to be used, these are described in the waste management plan, including: anticipated green and food waste volumes to be processed through these installations, where the compost will be used on site and the proposed locations are shown on the plans.				
Where educational worm farms are used, worm farms are located in shade.				
Foreshore and Waterway Developments – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
No waste bins are installed on jetties or open structures over the water. Where bins are installed in buildings that project over the water, the type of bin used is designed to prevent litter being blown or spilled into the water from the bin.				
Waste bins are installed on land near the land end of the jetty or structure where pedestrians can easily access them. These bins are installed at least four metres inland from the furthest reach of waves in storms, major lake waterway flood events and tides at highest king tide.				
The storage of hazardous or liquid wastes is completely enclosed and bunded to prevent spills reaching the water.				
Where boat maintenance is part of the activities to carried out at the facility, then the plan also provides for scrap metal recycling, boat engine oil, other boating liquid chemicals, empty chemical drums, batteries and any other special or recyclable wastes to be separately collected and appropriately managed.				
Separate bins for recycling, food waste, soft plastics and fishing line are provided.				
Service Stations – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Casual surveillance is provided from the public domain to any retail area, waste storage area or shop associated with the service station.				
Secure waste storage area(s) are provided to store separated wastes in suitable bins, compactors, containers. This includes bunded containers or area(s) if waste oil or chemicals are to be stored.				
The waste storage area(s) are lit, secured and meet security requirements as per Council's *Crime Prevention Through Environmental Design Guideline*.				
Waste storage area(s) have sufficient space to accommodate the volumes of waste that will be generated and the numbers and sizes of bins identified for use in managing the waste.				

Route from Buildings to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients 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 door of the premises to the waste storage area is less than 100 metres in length.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				
Child Care Centres – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The route is less than 50 metres and is safe and lit.				
Service Stations – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
There is secure, safe access for employees to the waste storage area while preventing illegal dumping and ensuring that the waste storage area does not increase risks of criminal incidents.				

Waste Collection and Removal	YES	NOT YET	NO	N/A
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by 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.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
Bins out for collection are not placed in front of adjacent premises during peak operating hours of the adjacent premises and only outside of that period if agreed to by the occupants and management of the adjacent premises, nor placed in front of neighbouring residential properties, unless agreed to by the owner and occupants of the dwelling(s).				
No more than 40 bins up to 360 litre size are placed out at any one kerbside location in relation to a single development				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
All bins larger than 360 litres will be collected from a designated on-site location.				

Waste Collection and Removal (continued)	YES	NOT YET	NO	N/A
Where bins will be collected on site, the waste collection vehicle route, turn space, swept paths and clearances are shown on scaled plans demonstrating that waste collection vehicles typically servicing the area can safely manoeuvre around the site. (*The minimum space required is for 8 metre long rear lift trucks, but Council's preference is space for at least a 10 metre long side lift truck.)*				
Where internal roads cannot cater for a Council 10 metre length side lift waste collection vehicle, then a letter is provided from a private waste service provider stating how they can provide the on-site waste collection service.				
Where bins will be collected on site, the on-site road access meets pavement quality standards to handle waste collection vehicle gross weights.				
Child Care Centres – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The WMP specifies how waste collection will be managed to avoid risk of an accident between heavy vehicles and children.				
Service Stations – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste collection vehicle reversing is minimised.				
Risk of collisions between waste collection vehicle and other vehicles and between vehicles and pedestrians, is minimised by design and vehicle routing.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: 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 bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than 100 metres in length for commercial developments.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
All Waste Management Plans will be provided to any relevant person involved in the operational use of the development, including building owners, building managers and occupants.				
Service Stations – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Implementation of the WMP will provide customers and employees with information, infrastructure and opportunities to maximise diversion of problem wastes, recyclables and food wastes from the general waste stream.				
Waste containers along with advisory signage is provided at the bowsers, near the building exits and within any sitting area that allow and enable customers to separate and dispose of wastes into recyclables, food, residual garbage and problem wastes.				

Operational Waste Management Checklist Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Plan Checklist and coversheet has been completed and signed				

4.1.7 Checklist for public and private recreation, amusement and function centres, entertainment facilities

Use the following WMP checklist for public and private recreation, amusement and function centres and entertainment facilities.

The general objectives, controls and guidance to meet operational controls set for all commercial / retail development apply to these developments, however specific land use controls under Part 9 of the DCP and Section 4 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 4.2, 4.2.2, 4.2.3or the DCP. For guidance, refer to the WMG section listed below:

- Public and private recreation (4.2.16)
- Amusement and function centres, entertainment facilities (4.2.17)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Commercial and Retail Development: Public and Private Recreation, Amusement, Function and Entertainment Facilities

Summary of Application

Site Address and Lot/Plan(s):

Summary of property use(s):
List main types of operational wastes that will be generated:

Applicant Information
Applicant's Name:
Applicant's Address:
Applicant's Phone / Mobile:
Applicant's Email:
Applicant's Authorisation: 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. **Signature of Applicant or Authorised Agent:** **Date:**

Summary of property use(s): **List main types of operational wastes that will be generated:**

Waste Types	**YES**	**NOT YET**	**NO**	**N/A**
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, bulky cardboard) can be effectively managed.				

Avoidance, Reuse and Recycling	YES	NOT YET	NO	N/A
Waste management solutions are an integral part of the design and operation.				
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 can access a range of waste services.				
Amusement, Function and Entertainment Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Food and drink will be served in containers that are reusable, recyclable or compostable and will be separated for reuse, recycling or composting.				
Excess food and drinks that are no longer wanted but and still consumable will be stored for donation to food charities wherever possible				
Food waste will be separated and composted.				

Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and premises				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the premises.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are 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.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste (e.g. furniture and equipment).				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Public and private recreation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Where food and drink will be sold or consumed at picnic or barbecue areas, then sufficient capacity of recycling, general garbage and (if viable) food waste bins will be installed at a suitably serviceable and safe location, unless Council agrees to waive this requirement.				
Outdoor bins are secured within the premises waste storage area for safekeeping during non-operational hours if operationally appropriate.				
Bins located around the site are equitably located and consider the accessibility needs of mobility-impaired patrons				
If waste bins are to be swapped around when full, or if additional bins are to be used for events, then waste storage areas must be established where both empty and full bins can be stored. This must be accessible during operational hours and during events so that full bins can be swapped for empty ones.				
The waste storage area(s) is 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 waste generated by the development, including any events and their site set up and site clean-up.				
A sufficient number of publicly accessible garbage and recycling bins are provided around the development in addition to any Council-supplied public place bins.				
Bins will be clearly marked with information on which wastes can be included in which bins.				
Bins will be located at site exit points and between five and twenty metres of food and drink sources, with other bin locations optional.				
Amusement, Function and Entertainment Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
A waste separation system is provided that enables all beverage containers to be recycled.				
Outdoor bins are secured within the premises waste storage area for safekeeping during non-operational hours if operationally appropriate.				
Where food and drink will be sold as takeaway or as picnic food consumed on site, then sufficient capacity of recycling, general garbage and (if viable) food waste bins will be installed at a suitably serviceable and safe locations within the premises and grounds.				
Where food may be taken from the premises and consumed at the street front, a bin will also be provided outside the front of the premises, unless Council agrees to waive this requirement.				
Bins located around the site for participants are located at site exit points and at points between five and twenty metres of where food and drink is consumed.				
Bins located around the site for participants are clearly signposted with signs above each bin advising which waste goes in which bin.				
Bins located around the site are equitably located and consider the accessibility needs of mobility-impaired patrons.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
A sufficient number of publicly accessible garbage and recycling bins are provided around the development in addition to any Council-supplied public place bins.				
Buildings are provided with a waste storage and recycling area designed and constructed in accordance with the detailed operational use objectives and controls.				
The waste storage area(s) is 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 waste generated by the development, including any events and their site set up and site clean-up.				
The waste storage area size is calculated on the basis of waste generation rates (refer to Tables 13 and 14 of the Waste Management Guidelines for advice on anticipated waste generation rates) and proposed bin sizes.				
The waste storage area is flexible in size and layout to cater for future changes of use or waste separation and management.				
Where large volumes of food waste is produced, frequent collection service arrangements and/or specialised containment (e.g. sealed bins or refrigerated waste storage) to minimise risks of pests and odour will be provided.				

Route from Buildings to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients 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 door of the premises to the waste storage area is less than 100 metres in length.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				
Public and private recreation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Where bins around the site need to be carted to a separate waste storage area(s), or will be emptied into larger bins that need to be manoeuvred through the site, then the route to the waste storage area(s) is free from obstructions and contain no: steps, walls, fences without gates, narrow gates, vegetation (other than grassed area), stepping stones, loose aggregates, tent guy ropes, power cords, or other obstacles.				
If events are held on the premises where merchandise, food and drinks are served, then access between waste generation sources and any shared bin storage areas is less than 250 metres.				

Route from Buildings to Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Amusement, Function and Entertainment Facilities – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
If bins inside buildings and around the site need to be carted to a separate waste storage area(s), or will be emptied into larger bins that need to be manoeuvred through the site, then the route to the waste storage area(s) must be free from obstructions and contain no: steps, walls, fences without gates, narrow gates, vegetation (other than grassed area), stepping stones, loose aggregates, tent guy ropes, power cords, or other obstacles.				

Waste Collection and Removal	YES	NOT YET	NO	N/A
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by 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.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
Bins out for collection are not placed in front of adjacent premises during peak operating hours of the adjacent premises and only outside of that period if agreed to by the occupants and management of the adjacent premises, nor placed in front of neighbouring residential properties, unless agreed to by the owner and occupants of the dwelling(s).				
No more than 40 bins up to 360 litre size are placed out at any one kerbside location in relation to a single development				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
All bins larger than 360 litres will be collected from a designated on-site location.				
Where bins will be collected on site, the waste collection vehicle route, turn space, swept paths and clearances are shown on scaled plans demonstrating that waste collection vehicles typically servicing the area can safely manoeuvre around the site. (*The minimum space required is for 8 metre long rear lift trucks, but Council's preference is space for at least a 10 metre long side lift truck.)*				
Where internal roads cannot cater for a Council 10 metre length side lift waste collection vehicle, then a letter is provided from a private waste service provider stating how they can provide the on-site waste collection service.				
Where bins will be collected on site, the on-site road access meets pavement quality standards to handle waste collection vehicle gross weights.				

Waste Collection and Removal (continued)	YES	NOT YET	NO	N/A
Amusement, Function and Entertainment Facilities – Only	**YES**	**NOT YET**	**NO**	**N/A**
Where possible, waste collection points access is from the rear of the property.				
In all cases, access to regular waste collection points is unimpeded.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: 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 bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than 100 metres in length for commercial developments.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
All Waste Management Plans will be provided to any relevant person involved in the operational use of the development, including building owners, building managers and occupants.				

Operational Waste Management Checklist Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Plan Checklist and coversheet has been completed and signed				

4.1.8 Checklist for signage

Use the following WMP checklist to confirm that the waste management controls for signage in DCP Part 9.17 are met. Signage impacts on waste management planning is also addressed in WMG section 4.2.12.

Complete the checklist and return with the development application as an attachment.

There are no further requirements for signage with respect to waste management planning.

Checklist –Waste Management Controls for Signage
Summary of Application
Site Address and Lot/Plan(s):
Summary of signage location, size and proximity to any surrounding waste storage or collection locations: ***Provide Drawings if necessary***

Applicant Information
Applicant's Name:
Applicant's Address:
Applicant's Phone / Mobile:
Applicant's Email:
Applicant's Authorisation: The checklist has been completed accurately and in full. **Signature of Applicant or Authorised Agent:** **Date:**

The following factors have been considered when proposing placement locations for signage:	**YES**	**NOT YET**	**NO**	**N/A**
The proposed signage does not obstruct access to the area where bins				
Signs must not obstruct the collection point nor overhead lift arc where				
Signs must not obstruct the route that bins are moved between bin				
Comments regarding any deviation from the waste management controls and guidance:				

4.1.9 Operational waste management plan for commercial developments

OPERATIONAL WASTE MANAGEMENT PLAN – COMMERCIAL DEVELOPMENTS

Ongoing use waste will be avoided or minimised by: _____

Attachments – the following documents are attached to this application:

Design and/or landscape floor plan drawings (drawn to scale) showing:

- ☐ all bins, facilities and areas to be used for on-site waste storage and collection
- ☐ door/gate widths, no steps, gradients and carting distances of route(s) between waste storage and collection points

Where waste collection will take place on site, drawings show:

- ☐ access roads/driveways, vehicle turning circles, pavement strength, collections points free from obstructions beside or above where bins will be emptied.
- ☐ A copy of the waste management system information guide that will be provided to occupants and property managers.

Type of commercial development _____ **Number of occupants or staff:**_____	**Estimated amounts** (m^3 /Tonnes stored between collections)	**Bin size and/or Volume reduction equipment capacity**	**No. of bins, balers and other equipment**	**Collection frequency**	**Reuse or recycling offsite** Specify recycling collection service provider and recycling facility destination	**Disposal to licenced landfill** Specify waste collection service provider and landfill destination
Waste Type:					*If Council collection services are used then below pre-filled text applies. Where private collection contractor is used then applicants must provide information.*	
Recyclable containers plastic and glass bottles / containers, Aluminium cans					*Recycling is processed at Solo Gateshead facility*	*n/a*
Cardboard and paper					*Recycling is processed at Solo Gateshead facility*	*n/a*
Green waste food and garden organic waste					*Processed at Lake Macquarie Organics Resource Recovery composting plant located on the Awaba Waste Management Facility*	*n/a*
Garbage other non-recyclable wastes					*n/a*	*240L/fortnight Lake Macquarie City Council kerbside collection service.*
Bulky waste furniture, mattresses,						
Problem wastes – sharps, medical, veterinary, sanitary						
Liquid wastes - grease trap, fats/oils, fuel, wastewater, other liquids, etc.						

Timber and Pallets						
Plastics (wrap/film, offcuts)						
Masonry						
Electronic waste						
Metals (specify)						
Fines						
Shredder flock						
Textiles						
Other (specify)						
Other (specify)						
Other (specify)						

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

Please submit with the Operational Waste Management Plan an updated version of this example waste management information guide that describes how the waste management for this development has been designed to operate. Note: not required for signage.

Waste Management Information Guide for Owners, Property Managers and Occupants

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 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
- Other recyclable containers and paper for yellow lid bin kerbside collection
- Residual garbage for red (or black) lid kerbside collection
- Return and Earn containers
- Batteries, mobile phones, smoke detectors, CDs and lightglobes for recycling
- Plastic wrap and film for recycling

Bins are located in the office for separation and recycling of:

- Paper and cardboard
- Printer cartridges
- Stationery
- Broken irreparable electronic equipment

Bins are located on the shop floor for:

- Flattened cardboard boxes
- Industry-specific recyclable wastes through private waste services

Route from your unit to the external bin storage:

(if needed) Please use the goods lift to access the basement waste storage area. A ramp is available to access the shared bin storage area. The shared waste storage area closest to you should be used for your waste.

Businesses are responsible for taking or ensuring collection of their own special wastes such as plastic wrap, batteries and chemicals to the appropriate city disposal/recycling location.

External Bin Storage (or Shared Waste Storage Area):

Location: (Insert waste management site plan here)

Keep your bins in the bin room nook created for this purpose.

Only utilise the commercial waste store; do not use the residential waste room for waste disposal.

Bins are to be stored in the side/back/front yard behind the screen/water tank/garage out of view of the road/driveway/neighbours.

The bin storage area for units 1-5 is located in the north east corner in the car park. The shared waste storage area for units 6-10 is located in the south-east corner near the stairs.

All food is to be disposed of in the food dehydrator. Do not include paper, tissues, plastic, cloth, cutlery or plates in the dehydrator. If you accidentally drop something in, advise the manager.

Separate your waste accurately, as per signage, otherwise the bins may not be able to be emptied or sent for recycling/composting.

Bins can be washed out using the tap in the waste storage area.

The light switch for the waste storage area is located to the left of the entrance doorway. Please turn the light off as you leave. The light switch for the waste storage area has a motion sensor and should turn on as you approach and will automatically turn off after ten minutes.

Please shut the gate/door to ensure vermin (and odours) are kept out. Please close bin lids to keep flies and other vermin out, minimise odours and ensure rain blowing under the eaves does not fill bins with water.

Disposal of bulk waste – used furniture, whitegoods, electronic waste, large furniture and mattresses – is the responsibility of each business. Businesses are encouraged to sell or donate safe, working equipment and furniture, or recycle where possible.

Placing bins out for collection:

Bins will be collected from the shared waste storage area.

Bins are to be place out on the kerbside on ABC Street for collection. Check with Council/Private Waste Contractor which night to place which bins out. (Or bins are to be placed out the front of your unit adjacent to the driveway). (Or caretakers/the nominated group bin monitor will place the bins out for collection the night before collection and bring bins back in.) Bins are to be brought back in within 24 hours of emptying.

Bin collections:

On bin collection day, customers must not park in front of the bins at kerbside (or in the loading zone). Please be patient and drive carefully while the waste collection staff/vehicle is collecting bins within the property.

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 on the right side kerb (when facing the units) and all green waste bins to the left.

Other Notes:

(Notes relevant to particular land uses or aspects of this design e.g. An onsite compost bin is available for use. Please do not include paper, meat, fish, bones, eggs, citrus peel or corn cobs in this compost bin. Please place these in the green lid kerbside bin.)

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

This business recycles polystyrene, printer cartridges and clean timber. Bins and a bag are available in the waste storage room for these wastes.

Chemicals must be stored on the shelves in the bunded area and be fully sealed and contained to prevent leaks.

4.2 Waste Aspects of the Development Control Plan for Commercial, Retail, Recreation and Tourism Facilities

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)

Depending on the nature of the development, commercial, retail, recreation and tourism developments can be built in various of the zones, other than the Special zones (SP1 and SP2).

The applicable DCP objectives and controls for these developments are defined in each of the zones described in DCP Parts 2-7.

These broad objectives and controls are also summarised in Waste Management Guidelines (WMG) sections:

- 4.2.1 (objectives); and
- 4.2.2 (controls).

Development controls for operational use are the same between all other zones except for Rural Zones (RU2, RU4 and RU6), where there is one less operational use detailed control regarding bin carting route distance.

Guidance on Controls

The controls specified in the DCP require that all operational use waste management be undertaken in accordance with these WMG. 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 detailed operational controls required to be met in the WMG are outlined in:

- 4.2.3 for all zones.

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 commercial developments and covered in this section of the Waste Management Guide are:

- 4.2.4 Bed and breakfast farm stay accommodation (DCP Part 9.2)
- 4.2.5 Caravan parks and manufactured home estates (DCP Part 9.3)
- 4.2.6 Child care centres
- 4.2.7 Foreshore and waterway development (DCP Part 9.7)
- 4.2.8 Health consulting rooms (DCP Part 9.8)
- 4.2.9 Places of public worship (DCP Part 9.12)
- 4.2.10 Service stations (DCP Part 9.15)
- 4.2.11 Sex service premises (DCP Part 9.16)
- 4.2.12 Signage (DCP Part 9.17)
- 4.2.13 Tourist and visitor accommodation (DCP Part 9.18)

Note: see WMG Section 2 for

- Home Business and Home Industry

Additional Specific Commercial Land Uses (WMG Section 4)

The WMG defines additional guidance to meet operational controls for specific land uses not presented within DCP Part 9. These include:

- 4.2.14 Commercial and retail Premises
- 4.2.15 Veterinary Hospitals
- 4.2.16 Public and private recreation
- 4.2.17 Amusement and function centres and entertainment facilities
- 4.2.18 Aged care facilities

4.2.1 General operational objectives (DCP Parts 2-7)

The following objectives for waste management specified in the DCP apply in all zones to the commercial developments listed in section 4.2.

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

Objectives (only those from the DCP relevant to waste)

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.

4.2.2 Operational controls (DCP Parts 2-7)

The following controls for waste management specified in the DCP apply in all zones to the commercial developments listed in section 4.2.

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

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: 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.*

4.2.3 Guidance to meet operational controls – all zones

The following guidance to meet operational controls for waste management apply in all zones to the commercial developments listed in section 4.2. 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	**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

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:

      iii. 100 metres in length for commercial developments,

      iv. 75 metres in length for residences, or

      v. 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.

4.2.4 Bed and breakfast / farm stay accommodation – specific land use objectives and controls (DCP Part 9.2)

DCP Part 9.2 provides Council's specific land use requirements for bed and breakfast and farm stay accommodation.

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

Objectives (only those from the DCP relevant to waste)

a. To ensure that bed and breakfast and farm stay accommodation developments provide an acceptable level of waste management amenity to guests that will maximise diversion of waste from landfill to recycling and composting.

Controls (only those from the DCP relevant to waste)

1. Waste management for Bed and Breakfast and Farm Stay Accommodation must comply with the "Guidance to Meet Operational Controls – All Zones" in the Lake Macquarie Waste Management Guidelines, with the following modifications:

Internal Storage

a. The development must provide a waste storage space accessible to all guests within the accommodation that has sufficient space to store separated recycling, food waste, problem wastes (such as batteries, light globes, cooking oils and paint), and residual garbage for a minimum of two days. This must be clearly labelled to identify which wastes can be included in which container.

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

b. A safe access route from the accommodation to the waste bin storage area(s) must be shown on the design plan, must be well-lit and must be no more than 100 metres.

4.2.5 Caravan parks and manufactured home estates – specific land use objectives and controls (DCP Part 9.3)

DCP Part 9.3 provides Council's specific land use requirements for Caravan Parks and Manufactured Home Estates. These objectives and controls also apply to camping ground developments regarding waste management.

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

Objectives (only those from the DCP relevant to waste)

a. *To ensure that waste management solutions are an integral part of the design and operation.*

b. *To provide for sufficient volume of accessible, safe, hygienic, aesthetic waste storage on the property, with noise, odour and visual impacts on occupants and neighbours minimised.*

c. *To enable maximum separation of reusable, recyclable, compostable and problem wastes.*

d. *To ensure equitable access for all occupants to opportunities to maximise diversion of waste to recycling and food and garden waste composting.*

e. *To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a choice of waste services.*

f. *To ensure that occupants of caravan parks and manufactured home estates have access to bulk waste disposal options (such as furniture and white goods).*

g. *To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles.*

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 between storage and collection points.*

Controls (only those from the DCP relevant to waste)

1. *The following must be shown on scaled plans to be submitted with the development application for operational use:*
    a. *waste bin locations around the park or estate (with bins drawn to scale);*
    b. *shared waste storage area(s) with all bins, problem waste, bunded storage and equipment shown to scale and bulk waste storage area delineated;*
    c. *location(s) from where waste will be collected, with all bins shown to scale (if different from storage areas);*
    d. *waste carting route(s) from around park/estate to waste storage area(s) (whether by ute, wheeling bins or other means);*
    e. *bin carting route(s) from waste storage to collection point(s); and*
    f. *for developments proposing on-site collection, the waste collection vehicle route, turn space, swept paths and clearances.*
2. *The caravan park or manufactured home estate must have, in accordance with Lake Macquarie City Council Waste Management Guidelines:*

a. *waste storage areas for use by occupants and visitors that have at least one of each of a garbage, recycling and green (including food) waste bin and these bins are co-located;*

b. *waste storage area(s) that are screened from the main living spaces of dwellings, public road and views from neighbours and are located away from doors, windows and air intakes of all dwellings and communal facilities. At least one waste storage area must be capable of storing problem wastes that cannot be collected in waste bins such as batteries, gas bottles, paints, oils, liquid wastes and chemical wastes and bulk waste (such as furniture and whitegoods. Space for storage must also be allocated and indicated on plans for any proposed waste management equipment (such as ute, bin carts, bin lifts, large bins and compaction equipment);*

c. *if bins are not collected directly from the waste storage area(s), then unobstructed, safe waste bin collection space(s) sufficiently sized to enable bins to be placed for removal by waste collection vehicle of all wastes generated.;*

d. *safe, lit access from dwelling to allocated waste storage area that is less than:*

   i. *75 metres in length, or*

   ii. *50 metres in length for adaptable housing and seniors' developments;*

e. *if bins are to be moved from waste storage to another location to be emptied, mobile garbage bin carting routes do not contain steps, walls, gateless fences, narrow gates, parked cars, vegetation, loose ground finishes, stepping stones or other obstacles;*

f. *for wheeled bins over 360 litres, bin carting distances that are not over three metres (or five metres for 660 litre bins or smaller) at gradients that are not steeper than 1:30 and do not contain steps, walls, gateless fences, narrow gates, parked cars, vegetation, loose ground finishes, stepping stones or other obstacles; and*

g. *bin enclosures that are all in character with the land use zone characteristics and blend with visual characteristics of the property.*

3. *Responsibility for the transfer, collection and disposal of recyclables, compostable wastes and residual garbage must be planned during the project's design stage. The development proposal must outline these arrangements in the Operational Waste Management Plan and/or in a waste management information guide. A copy of the waste management information that will be provided to property owners, caravan and manufactured home owners, property managers and occupants must be included with the development application.*

4. *Where bins (mobile garbage bins (MGBs) 360 litre size and smaller) are to be collected by a side-lift waste collection vehicle, sufficient space must be allocated so that bins can be placed at a minimum of one metre centres with half a metre each end of the row to allow the collection arm to grip around the bin to lift it. The length of continuous area required can be calculated as one metre per bin plus 1.5 metres for each separate collection area.*

5. *If the park or estate has less than 40 dwellings with shared bins and sufficient kerbside space is available, kerbside collection may be possible. No more than 20 bins of each waste type (40 bins on any one day) up to 360 litre size, should be placed out at any one kerbside location on a property.*

6. *Bins should be placed out for collection in a reasonably flat location 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 car parks; and where bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements. All bins larger than 360 litres must be collected from a designated on-site location.*

7. *For bins up to 360 litres to be collected on site, the on-site road access must meet pavement quality, turn and lift requirements for Council waste collection vehicle dimensions. Provision of service will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement. Vehicle turn arcs must be demonstrated as sufficient for up to 10 metre length domestic side-lift waste collection vehicles or else with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles. If internal roads are only built as per the Lake Macquarie City Council Vehicle Access Guidelines Medium Rigid Vehicle (MRV) standard, then it must be demonstrated that services using waste collection vehicles of 8.8 metres or less are available to provide the on-site waste collection.*

8. *Where the collection of waste in bins of 660 litre size or larger is required, the bin collection point must be on site and accessible by service vehicles with minimal reversing. Waste collection must not block on-site car parking, or access and egress from the property. Vehicle turn arcs must be demonstrated as sufficient for rear-lift waste collection vehicles or else with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles. If internal roads are only built as per the Lake Macquarie City Council Vehicle Access Guidelines Medium Rigid Vehicle (MRV) standard, then it must be demonstrated that services using waste collection vehicles of 8.8 metres or less are available to provide the on-site waste collection.*
9. *Measures must be implemented to mitigate the impacts of odour and noise associated with the management of waste. Noise must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.*

4.2.6 Child care centres – detailed operational guidance

Development for the purpose of a child care centre must comply with the requirements of the Education and Childcare SEPP 2017 where applicable. In addition, the following considerations should be made for waste management for a childcare centre.

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

Objective

a. To ensure that waste management solutions are an integral part of the design and operation.

Controls

1. Internal design should allow for waste storage for one days' worth of separated recycling, food and residual garbage, unless waste is to be disposed of to waste bins elsewhere in the premises more frequently.
2. Space should be provided in waste storage areas to separately collect recyclable and compostable wastes from residual garbage with sufficient capacity to maximise recycling and composting.
3. The route to place waste in external bins should be less than 50 metres, safe and lit.
4. The waste storage areas should be lit.
5. Waste storage areas internally and externally should be securable.
6. The waste management plan should indicate whether alternatives to disposal to landfill of nappies have been considered.
7. The waste management plan should specify how waste collection will be managed to avoid risk of an accident between heavy vehicles and children.
8. Where educational compost and worm farms are used, these should be described in the waste management plan, including: anticipated green and food waste volumes to be processed through these installations, where the compost will be used on site and the proposed locations (which should be shown on the landscape plan). Worm farms should be located in a shaded area. Food waste bins will still be required for foods that are inappropriate for home-style composting such as meat, citrus and dairy.

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

DCP Part 9.7 provides Council's specific land use requirements commercial foreshore and waterway developments, including commercial 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
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

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 ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.

Waste management at public and commercial facilities (DCP Part 9.7 – section 5.8)

Objectives (only those from the DCP relevant to waste)

a. To maximise opportunity for waste from boats or foreshore users to be collected separately for maximum resource recovery.

b. To ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.

Controls (only those from the DCP relevant to waste)

1. Applications for boatshed, jetty, slipway, boat ramps and other developments that extend over the water that are for commercial or public use must provide a completed Demolition, Construction and Operational Waste Management Plan (WMP) of the development, in accordance with Lake Macquarie Waste Management Guidelines. The Operational WMP must enable separate management of garbage, recyclables and problem waste (such as batteries, oils, paints and fishing line) generated by boats or foreshore users.

2. Where the development extends over the water at highest tide, the development must not include storage of hazardous or liquid wastes unless these are completely enclosed and bunded to prevent spills reaching the water.

3. If boat maintenance is part of the activities to be carried out at the facility, then the plan must also provide for scrap metal recycling, boat engine oil, other boating liquid chemicals, empty chemical drums, batteries and any other special or recyclable wastes to be separately collected and appropriately managed.

4. Recyclable and problem waste (such as batteries, oils, paints and fishing line) generated by boats or foreshore users, must be collected separately. This may include providing separate publicly accessible bins for garbage, recycling, food waste, soft plastics, fishing line and batteries and back of house bins for oils and paints.

4.2.8 Health consulting rooms – specific land use objectives and controls (DCP Part 9.8)

DCP Part 9.8 provides Council's specific land use requirements for health consulting rooms.

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

Objectives (only those from the DCP relevant to waste – numbering as per DCP)

8.2-b. To ensure the operation of Health Consulting Rooms do not have a detrimental impact on adjacent properties.

8.2-c. To ensure that sufficient and secure storage space is provided for storage of waste in segregated waste types.

8.2-d. To ensure that clinical, pharmaceutical, sharps, chemical and (if any) cytotoxic and radioactive waste generated by Health Consulting Rooms are disposed of in an appropriate manner.

Controls (only those from the DCP relevant to waste)

4. *Waste storage room(s) must have sufficient space for secure storage of separated segregated waste types including clinical waste, chemical waste, radioactive waste, cytotoxic wastes, recyclables, organic (compostable garden and food) waste and general waste, in accordance with NSW Department of Health Waste Management Guidelines for Health Care Facilities. This also includes space for trolley storage if required for managing wastes.*
5. *Waste storage room(s) must be able to be kept secure to prevent access by people other than staff, especially not by children.*
6. *Collection and disposal of any clinical, pharmaceutical, sharps, chemical and (if any) cytotoxic and radioactive waste generated by a Health Consulting Room must be undertaken by a waste collector licensed by the Environmental Protection Authority for this activity.*

4.2.9 Places of public worship – specific land use objectives and controls (DCP Part 9.12)

DCP Part 9.12 provides Council's specific land use requirements for places of public worship.

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

Traffic, parking and access (DCP Part 9.12 - 12.8)

Objectives (only those from the DCP relevant to waste)

d. To maintain the amenity of residential areas.
e. To ensure that appropriate access is provided for service / commercial vehicles.
f. To ensure the safety of both pedestrians and vehicle users in the surrounding locality

Controls (only those from the DCP relevant to waste)

2. *All vehicles shall be able to enter and leave the site in a forward direction*
3. *A clear distinction must be made between vehicle and pedestrian movements, both on site and off site. Measures should be implemented to separate these two movements and reduce potential conflict*

Operational Waste Management (DCP Part 9.12 -12.10)

Objectives (only those from the DCP relevant to waste)

a. To ensure that appropriate access is provided for waste collection vehicles.
b. To ensure the safety of both pedestrians and waste collection vehicle users in the surrounding locality.
c. To ensure that places of public worship have appropriate and sufficient waste services.
d. To ensure that appropriate access is provided for collection of waste.

Controls (only those from the DCP relevant to waste)

1. *All waste collection vehicles shall be able to enter and leave the site in a forward direction.*
2. *A clear distinction must be made between waste collection vehicle and pedestrian movements, both on site and off site. Measures should be implemented to separate these two movements and reduce potential conflict.*

3. *The Operational Waste Management Plan must include separate waste management provisions for the place of public worship (commercial waste management) from any residences on the property (residential waste management).*
4. *Waste volumes estimated for the place of public worship should include capacity to handle peak volumes during events with high attendance and waste generation.*
5. *For bins to be collected on site, the on-site road access must meet pavement quality, turn and lift requirements for commercial or Council waste collection vehicle dimensions, which must be able to turn to leave the site in a forward direction. Provision of service by Council waste services will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement.*

4.2.10 Service stations – specific land use objectives and controls (DCP Part 9.15)

DCP Part 9.15 provides Council's specific land use requirements service stations. These objectives and controls also apply to highway service centres.

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

Objectives (only those from the DCP relevant to waste)

d. To ensure that service stations provide customers and employees with information, infrastructure and opportunities to maximise diversion of problem wastes, recyclables and food wastes from the general waste stream.

e.. To ensure problem and special wastes can be separately and safely stored until collection for recycling or disposal;

f. To ensure secure, safe access for employees to the waste storage area while preventing illegal dumping and ensuring that the waste storage area does not increase risks of criminal incidents;

g. To ensure that waste storage visual impact, odours and waste collection noise do not reduce amenity for neighbours.

h. To ensure safe, obstruction-free access for waste collection vehicles.

Controls (only those from the DCP relevant to waste)

16. *Parking and outdoor storage areas, including waste storage, must be screened from adjoining housing development.*
17. *Casual surveillance must be provided from the public domain to any retail area, waste storage area or shop associated with the service station.*
18. *The Operational Waste Management Plan must identify a list of types of problem wastes and how these will be managed and recycled where possible, such as light globes, batteries, motor oil, tyres, car parts, chemicals and electrical wastes from vehicle and building facility maintenance and sanitary hygienic sanitary, nappy and medical sharps from restroom facilities.*
19. *Waste containers along with advisory signage must be provided at the bowsers, near the building exits and within any sitting area that allow and enable customers to separate and dispose of wastes into recyclables, food, residual garbage and problem wastes.*

20. A secure waste storage area(s) must be provided to store separated wastes in suitable bins, compactors, containers, including bunded containers or area(s) if waste oil or chemicals are to be stored. The waste storage area(s) must:

i. be lit, secured and meet security requirements as per Council's Crime Prevention Through Environmental Design Guideline;

ii. have sufficient space to accommodate the volumes of waste and bin sizes identified to manage the waste;

iii. be visually screened and integrated with the built form and landscaping in terms of appearance, materials, form, scale, location and orientation; and

iv. be designed and located to mitigate noise and odour impacts on neighbours.

21. A plan showing:

i. the waste collection point(s);

ii. routes and distances for bins to be moved to collection points (if other than collecting directly from the wastes storage area(s); and

iii. access, swept paths and bin lift arc space for waste collection vehicles with minimum 10m length, 5.4m wheelbase and 2.5m width to enable Council and/or locally available commercial waste collection vehicles clear access to the collection point.

22. Waste collection vehicle reversing should be minimised. Risk of collisions between waste collection vehicle and other vehicles and between vehicles and pedestrians, must be minimised by design and vehicle routing.

4.2.11 Sex services premises – specific land use objectives and controls (DCP Part 9.16)

DCP Part 9.16 provides Council's specific land use requirements for sex services premises.

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

Objectives (only those from the DCP relevant to waste)

c. To ensure that any hygienic sanitary or clinical-related wastes are able to be appropriately managed through provision of suitable waste separation, storage and collection infrastructure, information provision and management planning.

Controls (only those from the DCP relevant to waste)

10. Any hygienic sanitary or clinical waste that is generated by a Sex Services Premises must be separated and managed accordingly and collection must be undertaken by an appropriately licensed waste collector. Plans for management of this waste must be included in the Operational Waste Management Plan.

4.2.12 Signage – specific land use objectives and controls (DCP Part 9.17)

DCP Part 9.17 provides Council's specific land use requirements for signage.

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

Objectives (only those from the DCP relevant to waste)

b. To ensure that signs do not interfere with the function of infrastructure, services, or other mechanisms which support a development.

Controls (only those from the DCP relevant to waste)

7. *Signs must not obstruct access to the area where bins are stored.*
8. *Signs must not obstruct the collection point nor overhead lift arc where bins are collected.*
9. *Signs must not obstruct the route that bins are moved between bin storage and collection point.*

4.2.13 Tourist and visitor accommodation – specific land use objectives and controls (DCP Part 9.18)

The Lake Macquarie Local Environment Plan (LEP) specifies criteria for

"(k) the following matters are addressed or provided for in a management strategy for minimising any impact on the natural environment:
*"(iii) efficient and minimal energy and water use and **waste** output,"*

DCP Part 9.18 provides Council's specific land use requirements for tourist and visitor accommodation. These objectives and controls apply to hotels, motels, backpackers' accommodation, serviced apartments and other tourist and visitor accommodation.

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

Controls for development (DCP Part 9.18 section 18.1)

Objectives (only those from the DCP relevant to waste)

c. To ensure Tourist Accommodation and Tourist Resorts are designed, constructed and operated on the basis of sustainable practices, including building materials, energy efficiency, self-sufficient water supply and waste avoidance, resource reuse and recycling.

Controls (only those from the DCP relevant to waste)

3. For development containing 50 units or greater a development master plan must be prepared and submitted that identifies:

vi. On-site infrastructure and systems, including waste management and the proposed maintenance of those systems;

Operational waste management (DCP Part 9.18 section 18.3)

Objectives (only those from the DCP relevant to waste)

c. To ensure that Tourist Accommodation and Tourist Resorts provide an acceptable level of waste management amenity to guests that will maximise diversion of waste from landfill to recycling and composting.

Controls (only those from the DCP relevant to waste)

5. The development must provide a waste storage space accessible to all guests within their accommodation that is sufficiently sized to enable separate storage of garbage, recycling and food waste for a minimum of two days.

6. Where guests will need to transfer waste from their accommodation waste bin storage area(s), a safe access route from the accommodation to the waste bin storage area(s) must be shown on the design plan, must be well-lit, on an even path and must be no more than 75 metres from the accommodation.

7. The waste storage area must accommodate sufficient space for separate bins of sufficient capacity to hold enough recycling, residual garbage and food waste to allow for peak period use of the facility, within the waste collection frequencies identified in the Operational Waste Management Plan.

8. Garden and food waste may be processed in an on-site compost, worm farm or other organic waste processing solution for use on site in gardens, provided this can be undertaken in to standards equivalent to NSW Environment Protection Authority Resource Recovery Orders and Exemptions.

9. Waste storage areas should include space for storage of other wastes that can be recycled separately, or that must be managed separately from the kerbside collection service such as problem wastes, e-wastes and bulk wastes.

10. Odour and noise associated with the management of waste must be mitigated to ensure guests using the accommodation and facilities are not negatively impacted. Noise must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.

4.2.14 Typical commercial and retail premises – detailed operational guidance

Additional detailed operational guidance, beyond those listed in WMG section 4.2.3, apply to common commercial and retail premises. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

Typical commercial premises include most small and medium sized office-based businesses; examples include, but are not limited to, commercial offices, banks, post offices, hairdressers, funeral homes and registered clubs.

Retail premises include:

- Bottle shops
- Bulky goods
- Cellar door
- Garden centres
- Markets
- Kiosks
- Landscaping material supplies
- Neighbourhood shops
- Plant nurseries
- Rural supplies
- Hardware, building supplies
- Vehicle sale or hire premises
- Wholesale Supplies premises

Food and drink, pubs, restaurants, cafes, take-away food and drink premises

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

Guidance

1. Waste storage space is provided within each premise that is sufficiently sized to hold one days' volume of waste in separated containers to enable separation of recyclables (like glass, plastic containers, paper), food waste, soft plastic, problem waste (such as batteries, light globes, cooking oils and paint) and residual garbage. Large items like cardboard boxes are exempt provided a waste storage area outside of the premises is available.

2. The waste storage area(s) is in a room of the building, courtyard, caged back of house area, or secured area that is screened from: public roads, views from neighbours, main living spaces of neighbouring dwellings, neighbouring business entrances and the main entrance of the business itself. Screening will not rely on the growth of plants but they may supplement it.

3. The following applies only to retail businesses where food and drink will be sold as takeaway items, including from supermarkets, kiosks and permanent markets (but not including bottle shops and cellar doors):

A pair of garbage and recycling public-use bins should be installed in a suitable kerbside location outside the shop, or within 75 metres of the main entrance and should be maintained by the retail premises. Public-use bins may be secured within the premises waste storage area for safekeeping during non-operational hours of the retail premises if operationally appropriate. This requirement does not apply where:

a. there is already a public-use garbage and recycling bin within 75 metres,
b. a streetscape plan indicating public-use bins will be installed; or
c. Council agrees to waive this requirement.

4.2.15 Veterinary hospitals – detailed operational guidance

Additional detailed operational guidance related to waste management apply to veterinary hospitals. 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	**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

Guidance

1. Clinical wastes, cytotoxic waste, pharmaceutical, medicine waste, sharps, body parts, dead animals and non-sterilisable items contaminated with contagious or zoonotic pathogens (such as contaminated gloves, eyewear, mask, gown, head cover, earplugs and other personal protective equipment) must be separated into containers or suitable bags, clearly labelled and separately stored in the waste storage area(s) to comply with Part 11 (Clause 113) of the *Protection of the Environment Operations (Waste) Regulation 2014* requirements for the storage of clinical waste. The regulation requires:

a. any sharps waste:

i. to be contained in a rigid-walled container that satisfies the applicable requirements of Australian and New Zealand Standard AS/NZS 3816:1998, Management of clinical and related wastes (AS/NZS 3816:1998) and

ii. must, as far as practicable, be stored separately from other waste,

b. any clinical and related waste that is not sharps waste (and not mixed with sharps waste) to be contained in a rigid-walled container, or a bag, that satisfies any applicable requirements of AS/NZS 3816:1998, and

c. the container or bag in which the waste is contained to be labelled in accordance with AS/NZS 3816:1998.

2. Waste storage areas must be designed to prevent access by pests with potential as disease vectors.

3. Waste storage must be able to be secured from unauthorised access.

4. Clinical and related wastes, sharps and dead animals must be collected by a licenced waste transporter and taken to a licenced waste processor as per Part 11 of the *Protection of the Environment Operations (Waste) Regulation 2014* requirements relating to the transport and disposal of clinical waste, which are:

(a) during transportation:

(i) the waste is stored in a container or bag and labelled, in accordance with the core requirements and

(ii) each container or bag of the waste is placed in a rigid container that is leak proof, shatter proof and washable and has a securely fitting lid to prevent spills and

(b) the waste is not transported in a vehicle having a waste compaction system and

(c) a spill kit is carried in any vehicle transporting the waste that conforms with the requirements set out in the Waste Management Guidelines for Health Care Facilities and

(d) when the waste is in the vehicle and the vehicle is unattended, the vehicle is securely locked and (except where the vehicle is a railway vehicle) parked in an area that is secure and undercover.

5. Disposal of dead animals must comply with the guidelines set out in AUSVETPLAN – Operational Manual: Disposal (Animal Health Australia 2015 or latest updated version) and by Wildlife Health Australia for Australian animals. Chilled storage may be needed if the animals or animal parts will not be removed from the premises promptly. Dead animals and parts must not be left lying around, buried or cremated on site and must be taken to a licensed waste treatment facility, landfill, waste incinerator, pet cemetery or crematorium for proper disposal.

6. The waste information guide should contain sufficient information so that the occupants will be able to meet the waste management plan requirements under Part 11 Clause 113 (3) of the *Protection of the Environment Operations (Waste) Regulation 2014*, which are to:

a. ensure that there is a waste management plan, in respect of that waste, for the premises that is in accordance with the Waste Management Guidelines for Health Care Facilities (Waste Management Guidelines for Health Care Facilities means the publication entitled Waste Management Guidelines for Health Care Facilities (ISBN 0 7313 4060 4), issued by NSW Health in August 1998);

b. designate an appropriate person or persons responsible for implementing and monitoring the plan;

c. ensure that the plan is retained on the premises; and

d. make the plan available, on the request of the appropriate regulatory authority, for inspection and copying.

4.2.16 Public and private recreation – detailed operational guidance

Additional detailed operational guidance related to waste management apply to public and private recreational developments including picnic facilities, playgrounds and other recreation facilities in an outdoor environment. 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	**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

Guidance

1. Where food and drink will be sold or consumed at picnic or barbecue areas, then sufficient capacity of recycling, general garbage and (preferably) food waste bins must be installed at a suitably serviceable and safe location, unless Council agrees to waive this requirement.
2. Outdoor bins may be secured within the premises waste storage area for safekeeping during non-operational hours if operationally appropriate.
3. Bins should be accessible for use.
    a. if events are held on the premises where merchandise, food and drinks are served, then access between waste generation sources and any shared bin storage areas is less than 250 metres;
    b. bins located around the site should be equitably located and consider the accessibility needs of mobility-impaired patrons; and
    c. if bins inside buildings and around the site need to be carted to a separate waste storage area(s), or will be emptied into larger bins that need to be manoeuvred through the site, then the route to the waste storage area(s) should be free from obstructions and contain no: steps, walls, fences without gates, narrow gates, vegetation (other than grassed area), stepping stones, loose aggregates, tent guy ropes, power cords or other obstacles.
4. Waste storage area(s) should be provided and meet the following criteria:
    a. If waste bins are to be swapped around when full, or if additional bins are to be used for events, then waste storage areas should be established where both empty and full bins can be stored. This should be accessible during operational hours and during events so that full bins can be swapped for empty ones.
    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 (e.g. bin carts and compaction equipment) that is required for managing the waste generated by the development, including event operation, site set up and clean up.
    c. A sufficient number of publicly accessible garbage and recycling bins are provided around the development in addition to any Council-supplied public place bins.
    d. Bins should be clearly marked with information on which wastes can be included in which bins;
    e. Bins should be located at site exit points and between five and twenty metres of food and drink sources, with other bin locations optional.
    f. Sufficient storage space and a disposal plan for large bulky waste should be provided.

4.2.17 Amusement and functions centres and entertainment facilities – detailed operational guidance

Additional detailed operational guidance related to waste management apply to amusement and functions centres and entertainment facilities, including where catered activities occur in registered clubs. 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	**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

Guidance

1. Where food and drink are served for dine-in consumption, then the operational waste management plan should ensure that:
    a. food and drink are, wherever possible, served in reusable, recyclable or compostable containers;
    b. a waste separation system is in place to enable reuse, recycling or composting of containers;
    c. excess food and drinks that are no longer wanted but and still consumable can be stored for donation to food charities wherever possible;
    d. food waste is separated and composted.

2. Where food and drink is served for takeaway consumption, then sufficient capacity of recycling, general garbage and (if viable) food waste bins are installed at serviceable locations within the premises and grounds.

3. Where food is consumed along the development's street frontage, then a bin should be provided outside the front of the premises, unless Council agrees to waive this requirement.

4. Bins should be accessible for use and be:
    a. located at site exit points and within twenty metres of where food and drink is consumed;
    b. equitably located and consider the accessibility needs of mobility-impaired patrons;
    c. clearly signed to advise what types of waste belongs in the bins provided (e.g. garbage, recyclables, food).

5. A sufficient number of publicly accessible garbage and recycling bins are provided around the development in addition to any Council-supplied public place bins.

6. Outdoor bins may be secured within the premises waste storage area for safekeeping during non-operational hours if operationally appropriate.

7. If bins inside buildings and around the site need to be carted to a separate waste storage area(s), or will be emptied into larger bins that need to be manoeuvred through the site, then the route to the waste storage area(s) should be free from obstructions and contain no: steps, walls, fences without gates, narrow gates, vegetation (other than grassed area), stepping stones, loose aggregates, tent guy ropes, power cords, or other obstacles.

8. Waste storage area(s) should:

   a. be sized appropriately according to how much waste will be generated by the development and the number and footprints of bins that will be used, including space for empty bins and any equipment such as bin carts, compactors, balers, etc. (Tables 13, 15, 20 and 21 provide information on wastes commonly generated by development type and on commercial bin dimensions);

   b. be flexible in size and layout to cater for future changes of use or waste separation and management initiatives;

   c. provide (where large volumes of food waste is produced) frequent collection service arrangements and specialised containment (e.g. sealed bins or refrigerated waste storage) to minimise risks of pests and odour;

   d. include sufficient storage space and a disposal plans for large bulky waste like furniture and equipment.

9. Waste collection points should:

   a. be located at the rear of the property (where possible);
   b. have unimpeded access at all times.

4.2.18 Aged care facilities – detailed operational guidance

Additional detailed operational guidance related to waste management apply to aged care facilities. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

Aged care facilities provide a higher level of care that is in shared facilities and differs from lower level care of seniors living developments. For seniors living developments, see Section 3 of the WMG.

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

Guidance

1. Clinical wastes, cytotoxic waste, pharmaceutical, medicine waste, sharps and non-sterilisable items contaminated with blood or other body fluids (such as contaminated gloves, eyewear, mask, gown, head cover, earplugs and other personal protective equipment) should be separated into containers or suitable bags, clearly labelled and separately stored in the waste storage area(s) to comply with Part 11 (Clause 113) of the *Protection of the Environment Operations (Waste) Regulation 2014* requirements for the storage of clinical waste. The regulation requires:

   a. Any sharps waste:

      i. to be contained in a rigid-walled container that satisfies the applicable requirements of Australian and New Zealand Standard AS/NZS 3816:1998, Management of clinical and related wastes (AS/NZS 3816:1998); and

      ii. must, as far as practicable, be stored separately from other waste;

b. Any clinical and related waste that is not sharps waste (and not mixed with sharps waste) to be contained in a rigid-walled container, or a bag, that satisfies any applicable requirements of AS/NZS 3816:1998, and

c. The container or bag in which the waste is contained to be labelled in accordance with AS/NZS 3816:1998.

2. Internal design, including in resident's rooms, should allow for the option of waste storage for one days' worth of separated recycling, food and residual garbage, unless waste is to be disposed of to waste bins elsewhere in the premises more frequently.

3. Bins used by for residents and visitors should be clearly marked with information on which wastes can be included in which bins.

4. Waste storage areas should:

a. be sized appropriately according to how much waste will be generated by the development and the number and footprints of bins that will be used, including space for empty bins and any equipment such as bin carts, compactors, balers, etc. (Tables 13, 14 and 15 provide information on wastes commonly generated by development type and bin dimensions);

b. include sufficient storage space for large bulky waste like furniture and equipment; and

c. be lit and secured from unauthorised access.

5. The route between internal and external waste storage areas should be lit and free of obstructions.

6. Clinical and related wastes, sharps and medical waste should be collected by a licenced waste transporter and taken to a licenced waste processor as per Part 11 of the *Protection of the Environment Operations (Waste) Regulation 2014* requirements relating to the transport and disposal of clinical waste, which are:

a. during transportation:

i. the waste is stored in a container or bag and labeled, in accordance with the core requirements and

ii. each container or bag of the waste is placed in a rigid container that is leak proof, shatter proof and washable and has a securely fitting lid to prevent spills and

b. the waste is not transported in a vehicle having a waste compaction system and

c. a spill kit is carried in any vehicle transporting the waste that conforms with the requirements set out in the Waste Management Guidelines for Health Care Facilities and

d when the waste is in the vehicle and the vehicle is unattended, the vehicle is securely locked and (except where the vehicle is a railway vehicle) parked in an area that is secure and undercover.

7. A copy of waste management information is provided to staff and contractors, including kitchen staff, carers, nurses and cleaners. Information on how to separate wastes and safely operate waste related equipment should be displayed above the bins in the waste storage room as well as on the bins.

4.3 Operational Waste Management for commercial and retail – Information to Assist with Planning

4.3.1 Calculating waste generation volumes for commercial and retail businesses

Sufficient bin and waste storage capacity must be provided to accommodate the projected volumes of waste for the type of commercial, retail or industrial use proposed by the development. All premises must have access to garbage and recycling bins. Businesses that make or sell food or have a high proportion of green/garden waste in their operations should have food/green waste bins.

Use Tables 13 and 14 to calculate how much waste the development is likely to generate. This will inform the number and size of bins needed and waste storage area requirements. Operation of staff kitchen facilities should also be included when calculating the types and amounts of waste that the development will generate.

The NSW Environment Protection Authority (EPA) compiled the waste generation rates by business type provided in Tables 13 and 14 from audits of commercial and industrial operational waste streams.

Table 13 - Volumes of waste generated by type of commercial business – food and retail

Type of Premises	**Garbage**		**Recycling**		**Food**
FOOD	Litres per 100 sq. m of floor area		Litres per 100 sq. m of floor area		Litres per 100 sq. m of floor area
	Per day	5 days	Per day	5 days	Food waste makes up a high proportion of daily garbage
Bakeries	295 - 500	1475 - 2500	165 - 245	825 - 1225	High proportion of garbage
Butcher	185 - 200	925 - 1000	100 - 145	500 - 725	High proportion of garbage
Cafes	215 - 500	1075 - 2500	130 - 320	660 - 1600	High proportion of garbage
Delicatessen	30 - 80	150 - 400	Recyclable waste makes up a high proportion of weekly garbage		High proportion of garbage
Fish shop	80 - 250	400 - 1250	85	425	High proportion of garbage
Greengrocer	310	1550	410	2050	High proportion of garbage
Grocery and convenience stores	25 - 40	125 - 200	90 - 240	450 - 1200	High proportion of garbage
Hotel, bars, pubs	80 - 300	400 - 1500	35 - 85	175 - 425	High proportion of garbage
Licensed club without dining	25 - 50	125 - 250	20 - 27	100 - 135	High proportion of garbage
Licensed club with dining	50 (bar area) 660 (dining area)	250 (bar area) 3300 (dining area)	50 (bar and dining areas)	250 (bar and dining areas)	High proportion of garbage
Restaurants	190 - 460	950 - 2300	190 - 490	950 - 2450	High proportion of garbage
Retail – food	180 - 860	900 - 4300	135 - 685	675 - 3425	High proportion of garbage
Supermarkets with fresh food	30	150	Recyclable waste makes up a high proportion of weekly garbage		High proportion of garbage
Supermarkets without fresh food	140	700	75	375	High proportion of garbage
Takeaways	80 - 175	400 - 875	690	3450	High proportion of garbage

Type of Premises	Garbage		Recycling		Food
OTHER RETAIL	Litres per 100 sq. m of floor area		Litres per 100 sq. m of floor area		Litres per 100 sq. m of floor area
	Per day	5 days	Per day	5 days	Food waste makes up a low proportion of daily garbage
Book and audio-visual shops	25-52		60-172		Low proportion of garbage
Chemists	185 - 500		60 - 115		Low proportion of garbage
Dry cleaning	35 - 50		10 - 17		Low proportion of garbage
Hairdresser	40 - 62	200 - 310	40 - 55	200 - 275	Low proportion of garbage
Home ware and kitchenware shops	10 - 15		70 - 225		Low proportion of garbage
Newsagents and stationery shops	15	75	215 - 715	1075 - 3575	Low proportion of garbage
Pawnbrokers	20 - 30		0 - 1		Low proportion of garbage
Retail – non-food	40 - 300		50 - 715	250 - 3575	Low proportion of garbage
Shopping centres	15 - 25		10 - 25		High proportion of garbage if food courts
Shops less than 100 square metres	80 - 860		80 - 715		Low proportion of garbage
Shops more than 100 square metres	80 - 300		65 - 490		Low proportion of garbage
Showroom	10 - 22		25 - 100		Low proportion of garbage
Variety gift shops	15 - 22		35 - 110		Low proportion of garbage

Table 14 - Volumes of waste generated by type of commercial business – accommodation and other commercial

Type of Premises	Garbage	Recycling	Food
ACCOMMODATION	Per occupant per week	Per occupant per week	Per occupant per week
Backpacker hostel	30 - 35	10 - 15	Food waste makes up a high proportion of weekly garbage
Hotel accommodation	5 litres per bed per day and 20-50 litre per 100 sq. m of floor and 660 litre per 100 sq. m of dining area	Recyclable waste makes up a high proportion of weekly garbage	Food waste makes up a high proportion of weekly garbage
Motel (without public restaurant)	25	Recyclable waste makes up a low proportion of weekly garbage	Food waste makes up a low proportion of weekly garbage
Nursing home		Recyclable waste makes up a high proportion of weekly garbage	Food waste makes up a high proportion of weekly garbage

OTHER COMMERCIAL	Litres per 100 sq. m of floor area	Litres per 100 sq. m of floor area	Litres per 100 sq. m of floor area
Child care centre (1/3 children under 2 years old, open 10 hrs each day 5 days per week.)	14L per child per week (if using disposable nappies for one third of children) [19L with food]	12-15 litres per child/wk.	5 litres per child per week (7L if food prepared on site)
Education - Primary	7	Recyclable waste makes up a high proportion of weekly garbage	Food waste makes up a high proportion of weekly garbage
Education - Tertiary	25	3	Food waste makes up a high proportion of weekly garbage
Medical and optical	35 - 80	10 - 17	Food waste makes up a low proportion of weekly garbage
Offices	8-16	6-12	Food waste makes up a medium proportion of weekly garbage
Services	55 - 160	10 - 30	Food waste makes up a low proportion of weekly garbage

Source: NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities, December 2012, pp 87-88 and Waverley Council – Code for the Storage and Handling of Waste

4.3.2 Managing problem wastes

Where problem waste material will be generated, such as batteries, electronic waste, oils, chemicals and other potentially hazardous products, special disposal arrangements are required. Contact Council for advice on appropriate disposal options.

Medical and sharps wastes have specific disposal requirements through specialised services.

Plastic film recycling is available in New South Wales.

When installing fitout materials like flooring, equipment and furnishings, consider lease and maintenance options to avoid end of life disposal and maintenance costs. Some companies will also take back their products at the end of the product life and recycle it into new products.

Reusable items like furniture and fittings can be sold, diverted to second-hand retailers, or donated to charity.

Electronic wastes (e-wastes) can be recycled to extract valuable rare materials.

Petroleum oils and cooking oils are recyclable and must never be placed in kerbside collection bins.

Table 15 provides examples of general waste streams and problem wastes that different businesses may generate which may require specialist waste removal service providers.

Table 15 - Examples of types of wastes a business or industry may generate

Business/Industry	Types of Waste Generated	Specialist waste removal services
Air transport facilities, helipads, boat sheds	• General waste from customers, office, staff and facility maintenance • Packaging • Aircraft and watercraft maintenance waste	Seek services for: general recycling, food and garbage wastes; bathroom hygienic sanitary wastes, fluorescent light globes and smoke detectors, building waste, used furniture, paint and chemical containers, specialist oils, contaminated rags, e-wastes, metal alloys and mixed compound parts
Animal boarding or training	• General waste from customers, office, staff and facility maintenance • Packaging • Animal faeces • Uneaten food • Bedding, toys/brushes/leads, fencing, cages • Sludge from wash water filtration	Seek services for: general recycling, food and garbage wastes; bathroom hygienic sanitary wastes, light globes and smoke detectors, building waste, used furniture, paint and chemical containers, contaminated rags, e-wastes
Aquaculture	• Office and staff general wastes, building and facility maintenance wastes, • Packaging, • Sludge from wastewater filtration, deceased animals	Seek services for: General recycling, food and garbage wastes; bathroom hygienic sanitary wastes, fluorescent light globes and smoke detectors, building waste, used furniture, paint and chemical containers, e-wastes, sludges, consider animal waste on-site composting systems
Child care	• Office and staff general wastes, building and facility maintenance wastes, • Waste from crafts and activities, • Packaging • Nappies • Food wastes • Sharps and medicine	Seek services for: General recycling, food and garbage wastes; bathroom hygienic sanitary wastes, fluorescent light globes and smoke detectors, building waste, used furniture, paint and chemical containers, e-wastes, sharps, consider on-site worm farm and/or composting for educational value and use on gardens
Nursing homes	• Office and staff general wastes, building and facility maintenance wastes, • Packaging, • Hygiene wastes, • Food wastes • Pharmaceuticals/medical care including sharps	Seek services for: General recycling, green/food and garbage wastes; bathroom hygienic sanitary wastes, fluorescent light globes and smoke detectors, building waste, used furniture, paint and chemical containers, e-wastes, medical wastes and sharps, consider on-site food waste rapid treatment/dehydrator system, worm farm and/or composting for use on gardens and in garden club activities
Plant nurseries	• Office and staff general wastes, • Building and facility maintenance wastes, • Boxes and plastic packaging • Signage • Weeds, pruning, dead plants, soil • Pots • Sludge from wastewater filtration	Seek services for: General recycling, food and garbage wastes; bathroom hygienic sanitary wastes, fluorescent light globes and smoke detectors, building waste, used furniture, paint and chemical containers, contaminated rags, e-wastes, composting/worm farming on site

4.3.3 Grease arrestors

Businesses that produce trade wastewater as part of their operations, such as restaurants, workshops, factories, etc. require installation and maintenance of grease arrestors (grease traps) to manage their wastewater discharge to sewer. Trade wastewater is any liquid waste with the substance contained within it that is discharged to the sewerage system from a business other than normal domestic sewage.

Hunter Water Corporation regulates trade wastewater requirements for the installation of grease arrestors and liquid waste. Advice on trade and liquid waste can be gained by contacting Hunter Water Corporation through www.hunterwater.com.au/Building-and-Development/Trade-Waste/Trade-Waste.

4.3.4 Council waste service package options for businesses

Commercially rated properties pay one commercial waste management service charge with their rates that entitles the property to one weekly collection of a 240 litre garbage bin. The owner is responsible for supplying the bin. Owners of commercially rated properties can also opt into Council's recycling and food/green waste kerbside collection services for a fee. Additional waste collection options and bin sizes are available for a fee. See Table 16 for a full list. Bins may be shared between businesses if they are located in a shared accessible space, or they can be stored in individual businesses.

Table 16 provides dimensions of all bin options available from Council's commercial waste service and should be used to design waste storage areas with sufficient space to store enough bins to serve the development.

Table 16 - Options for bin sizes for commercial-rated properties

Options for bins for multi-occupancy residential developments			
Size (litres)	**Height (mm)**	**Width (mm)**	**Depth (mm)**
240	1060	585	730
360 (recycling only)	1100	680	848
660	1200	1260	780
1100	1330	1240	1070
1.5m3 (recycling only)	1170	2000	1070
3m3 (recycling only)	1500	2000	1550

Figure 15 - 1100 litre recycling bin

4.3.5 Designing operational waste management systems that avoid, reuse and recycle 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. Bins should be co-located so that no extra effort is required to take wastes to the recycling or green waste bins. Signage must be very clear on what can and cannot go into the bins to help occupants avoid contamination and to maximise what can be recycled.

Workplaces can also establish a shared "swap" for reusable waste can facilitate reuse of resources. This is a space within the development where people can place items they want to give away for other occupants to take away if they wish. Leftover items can be donated to charity.

Extra room in the waste storage area enables options to flexibly install extra bins or tubs to capture additional separated waste streams. Where the commercial use of the development is known at the development application stage, the unique waste streams generated by the premises can be identified, planned and accommodated at the design stage. If businesses are not yet known, the types of businesses targeted should be identified and the waste streams from these possible businesses accommodated. If generic space provided

at the design stage is insufficient for waste management for potential types of businesses, then those future business will not be able to establish and operate on the property (unless they can avoid generating the waste on the property).

However, if a business can identify ways to avoid waste generation, then less space needs to be dedicated to waste and recycling bins. For example food preparation being done in an offsite location (where peel, cores and other food scraps are managed) and brought to the shopfront in reusable packaging.

4.3.6 Providing recycling and food waste bins in public places

Some commercial developments, such as large retail centres, business parks, recreation areas and entertainment precincts, provide public spaces. These require careful operational waste management planning to prevent litter and provide opportunities for patrons to dispose conveniently of their waste while also having an opportunity to recycle.

The type of waste management/recycling system used in public places depends on the use, operation times and types of waste generated. For example, a shopping centre will generate different types of waste compared to a stadium.

Some examples of public place waste management systems include:

- stand-alone bins for mixed general waste;
- co-located bins for garbage and comingled recycling for paper, glass, plastic and aluminium containers (requires three separate collections); and
- co-located bins for garbage, comingled recycling and food only (requires three separate collections).

Bins should be placed where items are likely to be thrown away rather than where they are bought or consumed. Bins should also be as easy to access as possible so that patrons do not have to go out of their way to find and use them. The following locations provide the most effective use of recycling and food only bins:

- near entrances and exits – patrons will see them on the way in and use them on the way out;
- near toilets – this is a necessary trip and often used to dispose of rubbish. The bins will be seen by everyone who uses the toilets;
- known eating areas near tables or popular picnic locations;
- between eating/shopping areas and car parks – people will pass them on the way to and from their cars; and
- either end of pedestrian routes – consider ‘unofficial’ pedestrian routes as well.

Overhead signs are a key part of the success of a public waste management/recycling system. Signs that are visible from a distance tell people where the recycling station is located and then they are more likely to use it. How visible the sign should be from a distance will depend on the size and type of public place in which the stations are located.

For waterfront public place bins, bins must be more than four metres from the water’s edge (or further if the flood level or tides will flood the bins) and measures made to ensure that litter dropped in or beside the bin does not enter the water through wind, water flow or scavenging birds such as the ibis. This can be achieved by using bin enclosures, ensuring lids cannot be opened by birds, and designing litter-catching hedging, groundcover and sedge planting and other landscaping around the bins.

When locating public place bins, the route and distance to waste collection vehicles, or the route, weight and size of the waste collection vehicle entering the waterside area must be determined at the design stage.

Bin lid colour

Table 17 lists the standard bin colour coding and the types of recyclable materials that the bins should collect.

Table 17 - Colour coded waste bins

Bin Colour	Recyclable Material
Yellow lid*	Glass, plastic, aluminium and steel containers, paper and cardboard*
Lime Green lid	Green waste (including food and garden waste)
Red lid	Garbage (residual)

*Recyclable containers are collected mixed together for later separation at a Materials Recovery Facility.

Bin signage

Clear signage about what items belong in which bin is crucial. Figure 16 shows some examples of standard recycling bin signage.

Figure 16 - Standard bin signage

4.3.7 Waste storage and recycling areas

Businesses should be provided with a waste storage and recycling area designed and constructed in accordance with requirements of the detailed guidance provided in Section 4.2. They should also be flexible in size and layout to cater for future changes of use. The waste storage area size should be calculated on the basis of waste generation rates (refer to section 4.3.1 for advice on anticipated waste generation rates and proposed bin sizes). Appendix 3 also provides dimensions and sample bin layouts for a range of bin sizes to assist with designing waste storage areas.

Where possible, access to the waste storage area should be from the rear of the property. In all cases, access to the waste collection points should be unimpeded. For large developments, a communal waste storage area should be included within the design.

In large restaurants, where large amounts of food waste are generated, refrigerated food waste storage should be provided, or on-site food waste processing technology used.

4.3.8 Onsite treatment of food and garden waste

Diverting food and other organic wastes from landfill to on-site or offsite composting facilities can save businesses substantial money by reducing the weight of general garbage they send to landfill. Table 18 shows some potential cost savings from recycling food and organics waste.

Table 18 - Estimated cost savings from diverting food waste from landfill

Food organics kg/week	100 per cent of waste disposal costs saved if compost on site instead of dispose to landfill (not including on-site management costs) ($/year)	Approximate amount likely to be saved if pay for organics removal composting service (will vary on service costs) ($/year)
<10	<$500	Negligible
10-99	$500 - $5,000	Negligible
100-499	$5,000 - $20,000	$500 - $2,500
500-999	$20,000 - $50,000	$2,500 - $5,000
1000-3999	$50,000 - $200,000	$5,000 - $40,000
4000-10000	$200,000 - $500,000	$40,000 - $100,000

(Information adapted from KMH Environmental 2016)

Feasibility of on-site food waste treatment operations will depend upon the attitudes of business owners and property management. Forward planning at design stage is helpful in order to incorporate these systems into the development's landscaping plans.

If a communal composting area is proposed, the following should be taken into consideration:

- Odour – location should consider proximity to individual units/dwellings, including adjoining development and location of the site drainage system;
- The facility should be purpose-built; and
- The facility should be signposted and be the responsibility of the owner's corporation or managing agent.

Where volumes of food and organics waste are small then cost savings are also small. Composting and worm farms maybe a better, lower tech option to divert food and garden waste to beneficial use in on-site gardens. Displaying worm farms and composting operations can also be beneficial in child care, schools and other education facilities for the educative value.

If large volumes of food waste are generated then consideration could be given to use of a food dehydrator or rapid decomposer. Table 19 provides suggested scales of on-site processing equipment viability. (Information adapted from KMH Environmental 2016).

Table 19 - Scale of viability for on-site food waste processing equipment

Food organics kg/week	Practical equipment for on-site organics treatment	Comment
<10	Vermiculture/home worm farm	Household scale
10-99	Vermiculture, manual compost bin or tumbler	Household scale
100-499	Large manual In-Vessel Composting	
500-999	Macerator, medium automated In-Vessel Composting	
1000-3999	Macerator, dehydrator, accelerated digestion	
4000-10000	Anaerobic digestion, large automated In-Vessel Composting	May require an Environment Protection Licence if waste is received from offsite (but not if all waste is generated on site) http://www.epa.nsw.gov.au/licensing/

If waste or compost is moved off site, the EPA has issued Resource Recovery Orders (RRO) and Resource Recovery Exemptions (RRE) that allow the lawful application to land of rapidly decomposed or dehydrated food waste (from certain dehydrator units, under certain conditions) as a soil enhancement for the garden. More information is available from NSW EPA at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm.

The Orders and Exemptions are specific to certain makes of rapid decomposition or dehydration units and certain types of food waste inputs. Queries about what products have received Exemptions can be sent to waste.exemptions@epa.nsw.gov.au.

4.3.9 Volume reduction equipment

Where it is considered necessary, compaction and/or other volume reduction equipment may be provided in the garbage and recycling room. Such equipment could save on-site waste storage space where space is constrained by building design limitations.

Waste reduction equipment should be considered for all buildings greater than 25 metres high. Volume reduction equipment should not be used on recyclable materials as this makes recyclables (like glass, plastic containers, paper and cardboard) difficult to separate at recycling facilities and generally ruins the recoverable resources.

A reduction in overall space area requirements would not necessarily result where such equipment is proposed. Provision of waste storage space should always allow for possible future changes in on-site waste management arrangements.

4.3.10 When to have communal waste storage facilities

Commercial developments with multiple tenancies may require communal waste storage facilities, particularly:

- Where the design makes it difficult for all units to have ready access to a collection point and/or
- Where site characteristics restrict entry of vehicles.

The communal waste management facilities should be designed to enable each separately tenanted or separately occupied area within the building or complex to be provided with a designated and clearly identified space for the housing of sufficient containers to accommodate the quantity of waste and recyclable material generated.

The use of volume reduction equipment may be appropriate where space is a problem.

A building containing more than three storeys should be provided with an acceptable method for transporting waste from each level to a waste storage and recycling room. This could be a goods lift, a chute system, or some other means of providing direct and convenient internal access.

Where such facilities are used, space should be provided on each floor for temporary storage of waste material and recyclables.

Ongoing management is a significant issue and should be reflected in preparation of an Operational Waste Management Plan.

Paper and Cardboard

For offices and commercial premises, particular attention should be paid to paper and cardboard recycling, with source-separation at the waste storage and recycling area or room. Details should be included in the Waste Management Plan.

Education of staff and regular collection services is also important.

Food Shops, Restaurants and Refrigerated Waste Storage Rooms

Special attention should be paid to food scrap generation. Specialised containment should be provided and a regular collection service arranged to ensure that no impacts result from the activity.

Refrigerated waste storage rooms should be provided when large volumes, perishables such as seafood and infrequent collections are anticipated.

4.3.11 Waste storage for individual commercial units and shops

Every commercial unit should have a waste cupboard or alternative temporary storage area. The cupboard or storage area must be of sufficient size to store three bin caddies, or large bins if the business generates high volumes of waste. Minimum storage capacity must accommodate at least a single day's recycling, food waste and residual garbage and to enable source separation of garbage, recyclables and compostable material.

4.3.12 Waste storage for caravan parks and manufactured home estates

Caravan parks and manufactured home estates should provide occupants with waste storage solutions for recycling, food/green waste, residual garbage and bulk (furniture and whitegoods). Waste storage areas need to be within 75 metres of each dwelling (50 metres for adaptable living). In larger developments, this waste needs to then be collected by a smaller vehicle suited to the development's internal roads (such as a Ute) and then placed into larger communal bins. The storage area for the larger communal bins needs to be located where waste collection vehicles (typically front or rear-lift trucks) can safely access and lift the bins.

Due to the high-density living arrangements in caravan parks and manufactured home estates, waste management, including waste storage, should be well planned. Unfortunately, these types of development rarely offer recycling services to their occupants. Council receives a number of enquiries each year from caravan park occupants seeking recycling options rather than just garbage disposal in their estates. Generally, it is up to caravan park and manufactured home estate property managers to source waste disposal services. Sadly, they may not be aware that diverting recyclables and green waste from garbage can substantially reduce operational waste disposal costs. *The Sustainable Caravan Park Resource Efficiency Project Final Report (Russell Gladigau, Victoria, November 2007)* identified, through audits, that approximately 60 per cent of the waste generated from caravan parks is recyclable. The project involved auditing 51 caravan parks that collectively generated 2,364 tonnes of waste per year. They calculated that the parks could collectively save between $70,000 and $140,000 by diverting recyclable waste away from landfill.

The following regulations and State Environmental Planning Policies apply to waste management related approvals for caravan parks and manufactured housing estates:

- The NSW *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005* – requires standards to promote the health, safety and amenity of the occupiers of manufactured home estates and other moveable dwellings. Part 2 Manufactured home estates and manufactured home estates (Section 33 Garbage removal) and Part 3 Caravan parks, camping grounds and moveable dwellings (Section 127 Garbage removal) states that *"arrangements specified in the approval for the manufactured home estate / caravan park or camping ground must be instituted and maintained for the removal of garbage and for the maintenance of garbage receptacles in a clean and sanitary condition.*"

- *State Environmental Planning Policy No 21 – Caravan Parks* – states that a Council may grant a development consent required by this Policy only after it has considered the following: (d) whether necessary community facilities and services are available within the caravan park to which the development application relates or in the locality (or both) and whether those facilities and services are reasonably accessible to the occupants of the caravan park.
- *State Environmental Planning Policy No 36 – Manufactured Home Estates* - (1) states that Council may grant a development consent pursuant to this Policy allowing development for the purposes of a manufactured home estate only if it is satisfied: (c) that sufficient community facilities and services, whether situated within or outside the estate, are or will be available and reasonably accessible to the residents of the manufactured home estate.

4.3.13 Waste storage for child care centres

Child care centres can generate high volumes of nappy waste, recyclables and food waste. Waste disposal cost savings can be made by diverting recyclable and compostable wastes from general garbage bins to recycling and food/green waste collection services. Alternatives to sending disposable nappies to landfill are also possible by avoiding use of disposable nappies.

Child care centres are encouraged to have composting and worm farming for educational purposes and use of compost/fertiliser in educational gardens. The worm farm should be located in a shaded area (otherwise, the worms will overheat, dry up and die).

Sufficient internal waste storage space should be provided to hold a day's waste, unless waste will be taken to external waste bins more frequently. Waste storage areas internally and externally should be securable.

Distance and accessibility to place waste in external bins should be less than 50 metres from the building.

The waste storage areas and the route from child care centre to waste storage area must (for staff safety) be lit if staff will be working before 7a.m. or after 5p.m. in winter.

Indicative waste volumes generated at care centres include:

For a child care with 50 children (10 under the age of 2 years old), 480 – 720 litres of garbage per week, 360 litres per week recycling (720 litres collected fortnightly) and 120 litres per week of garden waste (240 litres collected fortnightly).

A case study at the Biralee Child Care Centre in Brisbane with 75 children identified that 55 litres of food waste was generated each week and recycled through an on-site worm farm. The remainder of food waste was included as a part of the 1610 litres of waste generated per week as garbage. Each week 855 litres (1710 litres per fortnight) of recycling was also generated.

The National Quality Framework (and of the corresponding National and State legislation) regulates early education and care services. Links to the legislation are avialable at https://www.acecqa.gov.au/nqf/national-law-regulations/national-law.

The relevant legislation is the *Education and Care Services National Law Act 2010* (and regulations) which can be found at https://www.acecqa.gov.au/nqf/national-law-regulations/national-regulations and require safe health and hygiene practices, and that arrangements must be provided for dealing with soiled clothing, nappies and linen, including hygienic facilities for storage prior to their disposal or laundering that are adequate and appropriate for the needs of the service, and located and maintained in a way that does not pose a risk to children. The NSW state legislation is *Children (Education and Care Services National Law Application) Act 2010*.

Further information is available at https://www.acecqa.gov.au/nqf/national-quality-standard/quality-area-2-childrens-health-and-safety in "Staying Healthy in Child Care: Preventing infectious diseases in child care", which discusses requirements for a hands-free nappies, wipes, change mat paper liner and gloves bin, waste from first aid for bleeding injuries and blood spill (including disposable scraper and pan); waste from clean up of faeces, vomit and urine and a plastic-lined waste bin for used tissues. The use of paper towel or waste-reducing option of a reusable cleaning cloth is also discussed.

The following regulations and State Environmental Planning Policies apply to waste management related approvals for education establishments and child care facilities (on government-owned land):

- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* – This Policy applies to the State. Clause (21) outlines general conditions of complying development certificates that include providing a garbage receptacle before works commence until works completion, that the waste must be sorted and disposed of at a waste or resource management facility and that the work site must be left clear of waste and debris at completion; clause (31), (46) and (49), (32), (53) and (56), and (36), (39) and (40) relate to existing universities, TAFE establishments and schools (respectively) and state that "Nothing in this clause authorises the carrying out of development in contravention of any existing condition of the most recent development consent (other than a complying development certificate) that applies to any part of the school, relating to waste management". Schedules 2 and 4 (schools), and Schedule 3 (Universities and TAFE) state the following regarding waste:

10 Waste

(1) A garbage and waste storage area for recyclable and non-recyclable waste materials and receptacles for those materials must:

(a) be provided as part of the development, and

(b) be located entirely within the lot on which the development is being carried out and not on a road or road reserve, and

(c) comply with the following appendices in the document titled Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (ISBN 978 1 74293 944 5), published by the NSW Environment Protection Authority in December 2012:

(i) Appendices A and B, for the size and location of garbage and storage areas and the size of waste receptacles,

(ii) Appendices C and D, for the design of openings of waste storage areas and loading bay turning circles for waste removal vehicles,

(iii) Appendix E, for standard signs for waste storage areas,

(iv) Appendix F, for the design and operational capacity of waste storage areas.

(2) The waste storage area must:

(a) be screened, and

(b) be located behind the primary road frontage building line, and

(c) not be located in any car parking, loading or landscaped area, and

(d) not be located on any side of the building that faces an adjoining lot on which there is residential accommodation.

(3) Despite subclause (1) (a), the waste storage area may be part of an existing facility on the site that has capacity.

4.3.14 Waste storage near waterways

Under the *Pollution of the Environment Operations Act 1997*, it is illegal to pollute or cause or permit pollution of waters.

This includes "introducing anything, including litter, sediment, fuel, oil, grease, wash water, debris, detergent, paint, etc. into waters or placing such material where it is likely to be washed or blown into waters or the stormwater system or percolate into groundwater". Developments must be designed to prevent litter and spills from entering the waterway or stormwater.

For more information, refer to the publication ***"Environmental Action for Marinas, Boatsheds and Slipways"*** (NSW DECC, 2007).

Some tips for managing wastes near waterways extracted from the above document include:

- Make sure vessel facilities include waste bins for domestic waste, hazardous substances, fish waste, waste oil, oily mixture, scrap metal and wastewater (including bilge water).
- Segregate waste for recycling. Mixing wastes may make them unsuitable for reuse or recycling. For example don't mix waste oil and solvents.
- Encourage staff to use metal /steel recycling bins for offcuts and waste scrap.
- Return empty drums to suppliers.
- If using many solvents, consider installing a solvent recycling unit on site.
- Do not put liquid or hazardous waste in general waste bins as the contents of these bins generally go to landfill where it can leach into water.
- Collect all solid wastes that cannot be reused or recycled and dispose of them appropriately. These wastes may include scrapings of marine growth, rags that can't be cleaned, empty containers that cannot be reused, brushes and blasting material.
- Collect used abrasive blasting material and paint chips (particularly if they contain poisonous antifouling or lead-based paints) by sweeping or vacuuming and reuse the abrasive material where possible.
- Solid wastes, such as sweepings, filters, spent abrasive material, containers and rags, contaminated with chemicals such as antifouling and paint, are generally classified as hazardous waste. They must be transported to a facility that is licensed to receive and/or treat that type of waste.
- Never burn wastes on site, not even timber wastes, unless expressly permitted to do so by the development's Environmental Protection Licence or local Council. The burning of some forms of chemically treated timber is prohibited by regulation.
- Store waste under cover to prevent rain running through the waste and polluting the soil and waterways.
- Make sure wind can't blow unsecured waste around, causing litter or potential water pollution.

Boat repair facilities and larger marinas, or businesses storing certain hazardous wastes, may need an Environment Protection Licence. Refer to *NSW Protection of the Environment Operations Act* (Schedule 1).

4.3.15 Access to waste storage areas from commercial premises

The route for shopkeepers and occupants of other commercial premises to the waste storage areas should be planned and included in the drawings provided with the Operational Waste Management Plan.

4.3.16 Access from waste storage area to waste collection locations

Accessibility is one of the most important considerations for enabling waste collection services to the development.

If the collection point is on the street, the manoeuvrability of collection vehicles through the street is an important factor. Generally, this is a large-scale subdivision matter. Most development applications will relate to an existing street system.

The first decision is whether access onto the site is required. This would depend on the following:

- the size of the development – whether travel distances for occupants require on-site storage and collection; and
- the volume of waste – whether the number of bins is too great for the width of street frontage.

The location of on-site storage and recycling areas should reflect consideration of the following:

- accessibility to the usual or arranged on or offsite collection point;
- access for individual occupants; and
- proximity to site occupants and adjacent properties in terms of noise and odour control.

If the complex has internal private roads, or driveways accessing waste storage areas and the plan is to present the bins there, the internal roads and driveways should be designed to accommodate Council's and contractor's waste service collection vehicles.

The Waste Management Plan should include instructions to the developer that before the units will be occupied, the Council should be contacted to inspect potential for waste service provision. Council and Council's recycling and green waste contractors will then conduct an site assessment to determine whether the requested service(s) are able to be provided at the property. The assessment will include:

- bin storage and security;
- ability for residents or caretaker to manoeuvre the bins to and from the kerbside or roadway for servicing;
- contamination potential; and
- accessibility for collection on site or at the kerb.

If the waste services can be provided on site, letters of indemnity will need to be signed by the strata owners' corporation or authorised managing agent to give Council and Council's contractors permission to drive on the private road. Refer to section 4.3.20 for additional information.

4.3.17 Waste collection points

It is critical when designing waste services that there is sufficient space to place bins out for collection, whether along Council roads, or along approved and indemnified internal access roads or driveways.

Designs should never plan to have bins placed for collection such that the bins obstruct driveway exits and entrances.

For most properties, the bins should be placed out 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.

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;
- 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); and
- bins should not be placed in gutters as this obstructs stormwater run-off.

4.3.18 Space requirements to collect smaller bins with side lift vehicles

Appendix 4 provides information and minimum kerb space requirements for bin spacing to enable kerbside collection. Council, its contractors and many commercial waste service providers use side lift waste collection vehicles to pick up 140 litre, 240 litre and 360 litre bins from the kerbside. Grippers extend from the left side of the truck, grip around the side of the bin and lift it up overhead, to tip upside down into the truck's hopper. The grippers can reach in front or behind a parked car, but not over them. The lift arc up into the air is obstructed if there are trees or shrub canopies, or any other overhead obstacles in the way. Bins cannot be lifted if they are backed hard up against a wall behind the bins because the bin will hit the wall or fence on the lift arc. If the street is one way, the waste vehicle can only collect from the left hand side of the road.

There must be sufficient space between bins to enable the grippers to grasp around the sides of the bins. The amount of accessible street frontage a development has will determine how tightly grouped bins need to be. However, a gap of at least 300mm between bins is required for side lift collection operations. If this isn't possible then another type of truck and/or larger bins will need to be used

Refer to sample layouts provided in Appendix 3 to calculate minimum dimensions for waste storage areas where 140, 240 and 360 litre bins are to be used inside a bin storage area or placed kerbside for collection.

4.3.19 Collection requirements for larger bins by rear and front lift collection vehicles

Businesses may opt for their own individual larger bins (or negotiate with neighbouring businesses to share large bins). Common sizes of larger bins include 660 litre, 1100 litre, 1.5 and 3 cubic metre mobile waste bins; rear-lift vehicles typically collect them. However, large front-lift commercial waste collection vehicles can also collect these bins and even larger stationary skip bins. All large bins should be positioned for collection where a waste vehicle can reverse up, or drive front on, to them then lift the bins into their rear or top hoppers without striking any overhead or adjacent obstacles. Where large mobile bins are used and where agreed by the service provider, waste collection crews can generally move bins up to 3 metres to the vehicle to empty it, provided the bin is sitting on a smooth paved surface with a slope of less than 1:30.

Refer to sample layouts provided in Appendix 3 to calculate minimum dimensions for waste storage areas where 660 and 1100 litre bins are to be used inside a bin storage area.

4.3.20 Collection from within the property boundary for Council commercial waste service

If the business owner wants to receive an on-site Council waste collection service (that collects bins from within the property boundary) then a Deed of Agreement between the business owner, or strata on behalf of owners and the Council is required to indemnify Council for any damage to property. The owner is also responsible for Council's legal costs regarding the Deed of Agreement if variations to Council's standard deed are required. For more information, contact Council on 02 4921 0333.

The on-site collection and Deed of Agreement cannot be offered unless a site inspection of the as-built property indicates that there are no issues that would otherwise prevent safe access and collection. Council will consider all of the following factors as part of the inspection:

- the convenient placement of waste storage and recycling areas and/or rooms;
- location of the area away from living/working space in buildings;
- proposed truck sizes to be entering the site;
- adequate driveway widths and height at entrance ways – minimum driveway width of 3.5 metres, maximum grade of 1:8, minimum vertical clearance 4.3 metres;
- structural capability of driveway to carry fully loaded waste collection vehicles;
- on-site manoeuvrability – turning circles or three point turn arrangements so that vehicles enter and leave the site moving in a forward direction, minimum turning circle 21.7 metres;
- legality of access – this could be by the creation of an easement. In some circumstances, private arrangements may be necessary for such on-site collection;
- the pavement must be of sufficient weight-bearing capacity;
- the pavement needs to be industrial-strength, designed for a maximum wheel loading of 7 tonnes per axle. For an industrial driveway entry on public land, this requires 150mm thick 20MPa concrete with F82 mesh, but the specifications should be checked with a qualified engineer;
- a minimum pavement width of 5.0m (or 6.5m if more than 24 vehicles park along the road, unless suitable passing bays are provided);
- all clearances and turn circles must meet minimum requirements, including no obstruction from trees, light poles, bollards, road kerbing, inadequate roundabouts, signs and overhead awnings;
- the operational use of the development must not obstruct access to bins. For example parked cars, delivery vehicles or site maintenance vehicles cannot be parked in ways that would interfere with waste collection operations. Care should also be taken to ensure staged construction activities do not initially prevent access for waste collection services to the early occupied dwellings while later stages are being built;
- Council and Council contractors do not currently enter secured areas that require keys for access (although private waste contractors may do so);
- Council and Council Contractors do not currently enter underground or under-building car parks (although private waste contractors may do so);
- one way roads must have all bins placed on the left side of the road for side lift collection vehicles;
- loop roads or large enough turn circles at cul-de-sac ends that require no three point turns are the safest solution, as all reversing is risky;

- if there is to be kerbside collection in an outside turn on a corner or in a cul-de-sac, then a minimum kerb radius of 10 metres is required;
- vehicles must not be required to make a three point turn to turn corners;
- exit from and re-entry to the Council road(s) must be safe to execute;
- the longitudinal road gradient must be less than 1:7 (15 per cent) and the turning heads must be maximum gradient of 1:10 (10 per cent); and
- some development designs may be best resolved by installing a heavy vehicle turntable rather than allocating large turn space.

4.3.21 Private commercial waste collection service inside buildings and basements

For private waste contractors to enter buildings and basements, the following requirements must be met:

- ramp access gradient must be no more than 1:8;
- the height clearance over all areas traversed by waste collection vehicles must be sufficient for the waste vehicles to be used to enter, which is generally requires at least 3.8 metres height clearance;
- vehicle exit in a forward direction; if a turning area is required then it must be in an area that is not used for car parking and ensure that the turning circle is clear of all obstructions; and
- the ramp and floor pavement needs to be industrial-strength, designed for a maximum wheel loading of 7 tonnes per axle. For an industrial driveway entry on public land, this requires 150mm thick 20MPa concrete with F82 mesh. Specifications should however be checked by a qualified engineer.

4.3.22 Waste system Information Guide for Owners, Property Managers and occupants

A waste system information guide should be provided to commercial and industrial business 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 in the businesses or tenancies;
- individual and communal waste storage area(s) within the development; and
- the waste collection point(s).