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3N.1 Introduction

The building and construction industry in particular is a major contributor to waste, much of which is still deposited to landfill. The implementation of effective waste minimisation strategies has the potential to significantly reduce these volumes.

3N.1.1 Land to which this Part Applies

This Part applies during demolition, construction and on-going management of a development within the Bayside LGA where this DCP applies.

This Part needs to be read in conjunction with:

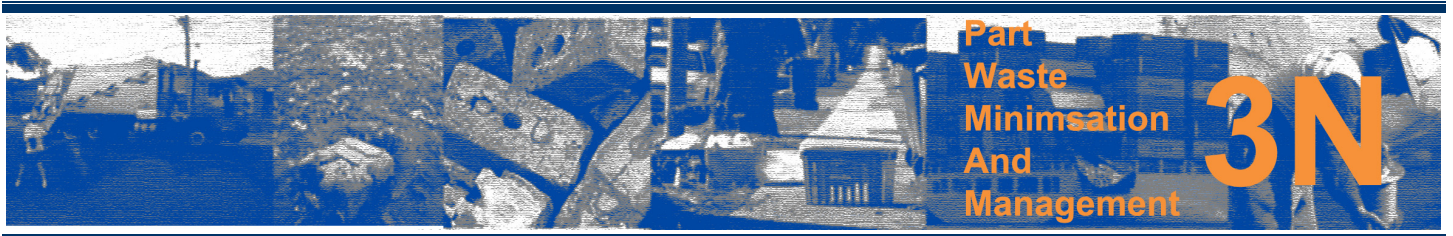
- Part 1 - Introduction
- Part 2 - Notification and Advertising
- Part 3 - General Provisions
- Part 4 - Residential Development
- Part 5 - Business Centres
- Part 6 - Employment Zones
- Part 7 - Other Development Types and Land Uses
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- Part 9 - Key Sites
- Part 10 – Technical Guidelines

Note: A Site Waste Minimisation Management Plan (SWMMP) is required for development identified as Complying Development in accordance with *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*. Site waste minimisation and management must be carried out in accordance with an approved SWMMP, and docketts retained on site to show where any construction and/ or demolition waste has been transported.

A Site Waste Minimisation and Management Plan (SWMMP) is not required in association with Exempt Development carried out in accordance with *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*. However, a person carrying out exempt development should seek to minimise the generation of waste in the construction and operation of any such use or activity and deal with any waste generated in accordance with the objectives in this Part.

3N.1.2 General Objectives

- 01** To encourage best practice in waste management that minimises waste generation, facilitate waste separation and maximises reuse and recycling;
- 02** To reduce the amount of construction and demolition waste and waste generated in the operation of a development going to landfill; and
- 03** To ensure suitable and efficient waste storage, recycling and collection in all development.



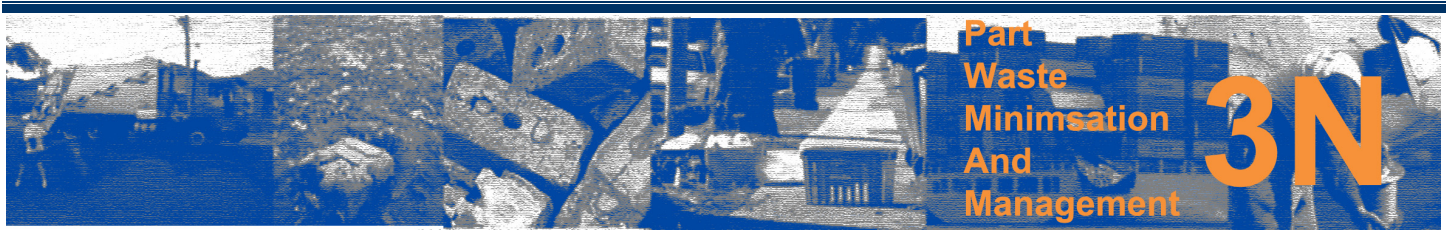
3N.2 Demolition and Construction

Objectives

- O1 To minimise the volume of waste generated during demolition and construction;
- O2 To maximise the re-use and recycling of materials generated during demolition and construction; and
- O3 To minimise the volume of waste that is directed to landfill.

Controls

- C1 A Site Waste Minimisation and Management Plan in accordance with Part 1 – Model Site Waste Minimisation and Management Plan (refer to **Part 3N.4 - Appendices**) must be submitted for Development Application involving:
 - (i) Demolition
 - (ii) New development; and
 - (iii) Alterations and additions affecting more than 20m² of floor area.
- C2 A detailed plan must be submitted showing:
 - (i) A scaled drawing of any bin/container storage room (s) and area(s), temporary holding area(s), waste chute service room(s) and interim recycle/waste storage room(s);
 - (ii) Details regarding how waste is to be minimised within a development;
 - (iii) Estimation of quantities and types of materials to be re-used or left over from removal from the site;
 - (iv) Details regarding the types of waste and likely quantities of waste to be produced;
 - (v) A site plan showing areas away from public access for reusable materials and recyclable materials during demolition and construction and the vehicle access to these areas;
 - (vi) Details of reusing and recycling methods for waste either on-site or off-site;
 - (vii) Target for recycling and reuse;
 - (viii) Nomination of persons responsible for ensuring targets are met and the person responsible for retaining waste dockets from facilities appropriately licensed to receive the development's construction and demolition waste;
 - (ix) Confirmation that all waste going to landfill is not recyclable or hazardous; and
 - (x) Measures to reuse or recycle at least 80% of construction and demolition waste, either on site or diverted for reused and recycling with receipts sufficient to demonstrate the target will be achieved.

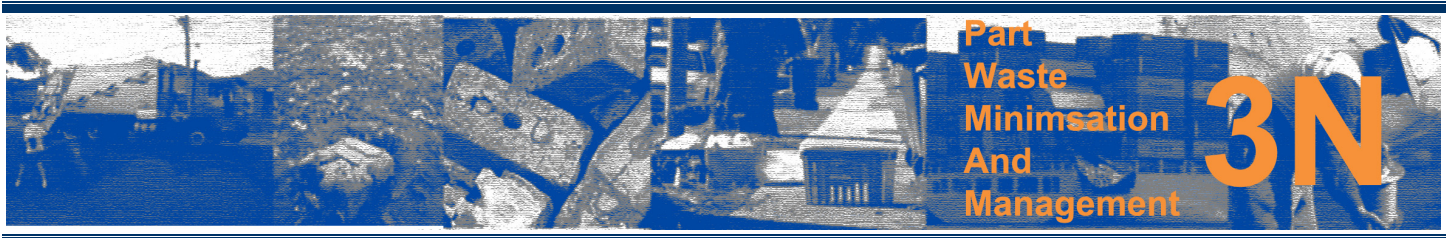


- C3** Materials that have an existing reuse or recycling market should not be disposed of in landfill. **Table 1** provides some examples of demolition materials and potential reuse/recycling opportunities.
- C4** Separate collection bins or storage areas for materials to be reused, recycled and directed to landfill are to be provided.
- C5** All storage areas and collection bins must be located within the site boundaries.
- C6** Any material moved offsite is to be transported in accordance with the requirements of the *Protection of the Environment Operations Act (1997)*.
- C7** Where space on a development is limited, approval may be granted by Council to place a skip on a footpath or other public area if the location of the container(s):
- (i) Does not disturb traffic flow or pedestrian movement; and
 - (ii) Does not disturb normal stormwater flow.
- C8** Generation, storage, treatment and disposal of hazardous waste and special waste (including asbestos) must be conducted in accordance with relevant waste legislation administered by the EPA and relevant Occupational Health and Safety legislation administered by WorkCover NSW.
- C9** Evidence/records such as weighbridge dockets and invoices for waste disposal or recycling services are to be retained on site demonstrating lawful disposal of waste.
- C10** All waste and recycling is to be stored so as to prevent damage by the elements.
- C11** Storage areas must be easily accessible for collection vehicles, clearly signposted indicating purpose and content and managed appropriately to prevent stormwater pollution, damage to vegetation and odour and health risks.

Table 1 - Example of Demolition Materials and Potential Reuse/Recycling Opportunities

Source: *Combined Sydney Regional Organisation of Councils Model DCP 1997*

Material	Reuse/Recycling Potential
Concrete	Reused for filling, levelling or road base
Bricks and Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping and driveways
Untreated Timber	Reused as floorboards, fencing, furniture, mulched or sent to second hand timber suppliers
Treated Timber	Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers
Doors, Windows, Fittings	Sent to second hand suppliers
Glass	Reused as glazing or aggregate for concrete production
Metals (fittings, appliances and wiring)	Removal for recycling
Synthetic Rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps
Significant Trees	Relocated either onsite or offsite
Overburden	Power screened and used as topsoil
Garden Waste	Mulched, composted
Carpet	Can be sent to recyclers or reused in landscaping
Plasterboard	Removal for recycling, return to supplier
Electrical Waste	Must be correctly recycled



3N.3 On-going Operation of Development

3N.3.1 General Requirements

Objectives

- O1 To provide guidelines for the storage, amenity and management of waste;
- O2 To promote safe practices for storage, handling and collection of waste and recycling; and
- O3 To minimise amenity impacts from waste.

Controls

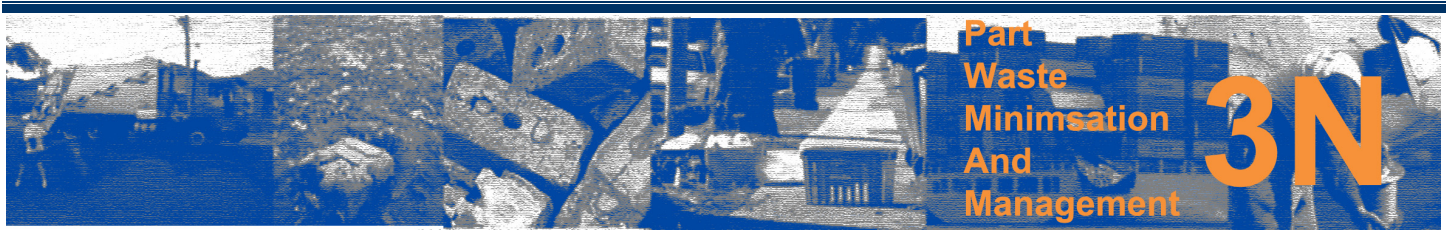
- C1 A Site Waste Minimisation and Management Plan (SWMMP) in accordance with Part 2 - Model Site Waste Minimisation and Management Plan (refer to **Part 3N.4 - Appendices**) must be submitted for Development Application involving:
 - (i) New development;
 - (ii) Change of use of an existing premises; and
 - (iii) Alterations and addition that would affect waste management facilities or practices.

Note: Does not apply to attached dwellings, dwelling houses, semi-detached dwellings or secondary dwellings.
- C2 A detailed plan must be submitted showing:
 - (i) The location of an individual recycling/waste storage room/area for each tenancy or the location of communal waste/recycling storage room(s) or area(s) for the entire development;
 - (ii) The location of an indoor recycling/waste cupboard for each and every kitchen area in the development;
 - (iii) The location of on-site individual compost container for each tenancy or communal compost container for the entire development;
 - (iv) The location of any waste chute(s) and service room (for accessing a waste chute and recycling bins) on each floor of the building;
 - (v) The location of any interim recycling/waste storage room (for access recycling and waste bins) on each floor of the building;
 - (vi) The location of any service lifts used for transporting recyclable/waste materials;
 - (vii) The location of any waste compaction equipment;

- (viii) Where applicable, details of grey water collection, treatment and onsite utilisation;
- (ix) The location of any trade wastewater discharge points;
- (x) Where applicable, an identified on-site collection point for the collection and emptying of bins/containers;
- (xi) The path of travel for moving bins/containers from the recycling/waste storage room(s) or area(s) to the identified collection point(s);
- (xii) The on-site path of travel for recycling/waste collection vehicles (if collection vehicles are to enter the site); and
- (xiii) A scaled drawing of any bin/container storage room(s) and area(s), temporary holding area(s), waste chute service room(s) and interim recycle/waste storage room(s).

Waste Storage

- C3** All waste and recycling must be stored in Council approved bins or skips, with lids closed to reduce littering, stormwater pollution, odour and vermin. Waste and recycling not presented in the correct manner will not be collected.
- C4** All organic waste should be either treated in a composting or worm farming system or stored in a Council approved bin or skip.
- C5** Waste and recycling receptacles must be stored at all times within the boundary of the site and screened from the public domain/streetscape.
- C6** No incineration devices are permitted.
- C7** Waste and recycling storage rooms must be:
 - (i) Constructed of concrete or other approved materials at least 75mm thick;
 - (ii) Finished with a smooth even surface;
 - (iii) Graded and drained to the sewerage system and approved by the Sydney Water Corporation;
 - (iv) Fitted with a close fitting and self-closing door that can be opened from within the room;
 - (v) Fitted with smoke detectors in accordance with Australian Standards and connected to the fire prevention system of the building;
 - (vi) Equipped with taps supplying hot and cold water, mixed through a centralised mixing valve with a hose cock and fitted with an aerator to increase water efficiency;
 - (vii) Designed to include a clear and easy-to-read “NO STOPPING” sign and “DANGER” sign on the external face of waste storage rooms where appropriate;
 - (viii) Designed to ensure waste-water from the cleaning of the waste storage area and bins, is not to drain into the stormwater system; and
 - (ix) Fitted with childproof compacters or mechanical devices where used in the storage of waste.



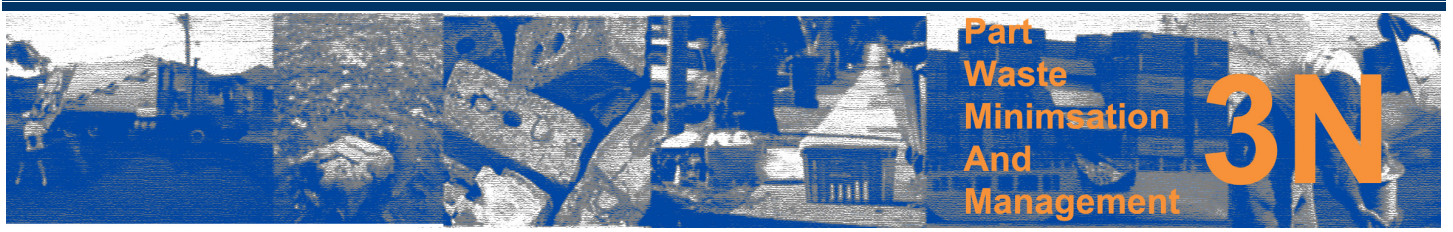
- C8** Separate containers of sufficient size must be provided to accommodate the storage of waste and recycling likely to be generated on the premises between collections and any associated equipment.

Note: Waste/Recycling Generation Rates for various commercial and residential developments are provided as indicative references only in **Table 2**.

Table 2 - Waste/Recycling Generation Rates

Source: Better Practice Guide for Waste Management in Multi-Unit Dwellings

Premises type		Waste generation	Recyclable Material Generation
Backpackers' Hostel		40L/occupant space/week	20L/occupant space/week
Boarding House, Guest House		60L/occupant space/week	20L/occupant space/week
Food premises:			
	Butcher	80L/100m ² floor area/day	Variable
	Delicatessen	80L/100m ² floor area/day	Variable
	Fish Shop	80L/100m ² floor area/day	Variable
	Greengrocer	240L/100m ² floor area/day	120L/100m ² floor area/day
	Restaurant, Café	10L/1.5m ² floor area/day	2L/1.5m ² floor area/day
	Supermarket	240L/100m ² floor area/day	240L/100m ² floor area/day
	Takeaway food shop	80L/100m ² floor area/day	Variable
Hairdresser, Beauty Salon		60L/100m ² floor area/week	Variable
Hotel, Licensed Club, Motel		5L/bed space/day; plus 50L/100m ² bar area/day; plus 10L/1.5m ² dining area/day.	1L/bed space/day; plus 50L/100m ² bar area/day; plus 50L/100m ² dining area/day.
Offices		10L/100m ² floor area/day	10L/100m ² floor area/day
Shop less than 100m ² floor area		50L/100m ² floor area/day	25L/100m ² floor area/day
Shop greater than 100m ² floor area		50L/100m ² floor area/day	50L/100m ² floor area/day
Showroom		40L/100m ² floor area/day	10L/100m ² floor area/day
Multi-Unit Dwellings		80L/unit/week	40L/unit/week



Environmental Amenity

- C9** Waste and recycling storage areas must be visually and physically integrated into the design of the development.
- C10** Waste and recycling storage areas must be designed and located to avoid adverse impacts on the amenity of adjoining sites including noise and odour.
- C11** All waste and recycling receptacles must be put out for kerb-side collection no earlier than the previous evening.
- C12** All waste and recycling receptacles must be removed from the kerb-side or laneway as soon as possible on the same day as the collection service.

Multi Unit, Multi Dwelling, Commercial and Mixed Use Development

- C13** The design of the waste and recycling management system must identify responsibility for cleaning of waste receptacles and storage areas and for transfer of bins within the property, to the collection point and back to the storage areas.
- C14** Clear and easy to read signs identifying the different waste receptacles (e.g. paper/cardboard recycling, plastic/glass/metal recycling, waste and green waste) and where in the storage area these should be positioned must be displayed.
- C15** The design of the waste and recycling management system must identify responsibility for cleaning of waste receptacles and storage areas and for transfer of bins within the property, to the collection point and back to the storage areas.
- C16** Clear and easy to read signs identifying the different waste receptacles (e.g. paper/cardboard recycling, plastic/glass/metal recycling, waste and green waste) and where in the storage area these should be positioned must be displayed.

3N.3.2 Residential Development

Objectives

- O1** To ensure the storage, amenity and management of waste is sufficient to meet the needs of residential development; and
- O2** To ensure waste from within residential development can be collected and disposed of in a manner that is healthy, efficient and minimise disruption to amenity.

Controls

- C1** Residential Development must provide recycle/waste bins in accordance with **Table 3**.
- C2** Waste and recycling storage areas must be located in a position convenient for both users and waste collection personnel.
- C3** Where a building consists of 40 or more residential units, 660L bins can be used, subject to negotiation with Council. The use of 660L bins will only be considered where:
 - (i) The building has more than 20 units; and
 - (ii) Adequate off site access for waste collection vehicles is provided and is in accordance with relevant Australian Standards.
- C4** For developments with over 40 units, a compactor may be used subject to negotiation with Council.
- C5** Any volume reducing equipment must be installed in accordance with the manufacturers design specifications. The equipment must be installed on either a concrete plinth 75mm high or on legs at least 150mm high and have a space between the unit and the walls to enable easy access for cleaning and maintenance. Compaction rates must not be set higher than 2:1.

Table 3 - Type and Number of Bins Required for Residential Development

Type of Development	Recycling Bins	General Waste Bins	Green Waste Bins
Attached dwellings, dwelling houses, semi-detached dwellings, dual occupancies and secondary dwellings	1 x 240L per dwelling or 1 x 120L per dwelling upon request	1 x 120 L per dwelling or 1 x 240L (optional) per dwelling	1 x 120L or 1 x 240L (optional) per dwelling
Multi dwelling housing, residential flat buildings, senior housing and residential	1 x 240L per 2-3 dwellings	1 x 240L per 2-3 dwellings	1 x 240L (optional) per 5 dwellings

component of mixed use development			
Boarding houses, hostels residential care facilities and tourist visitors' accommodation	1 x 240 per 6 occupant space or part thereof	1 x 240 per 6 occupant space or part thereof	1 x 240 per 6 occupant space or part thereof

Dwelling Houses

- C6** A waste/recycling storage area must be provided on-site for each new dwelling house, which is of sufficient size to accommodate Council's waste, recycling and garden waste bins. Refer to Table 4 for indicative bin sizes.
- C7** The waste/recycling storage area must be located to avoid vandalism, nuisance and adverse visual impacts.
- C8** The waste/recycling storage area must be easily accessible and have unobstructed access to Council's collection point.

Table 4 - Indicative Bin Sizes

Source: Better Practice Guide for Waste Management in Multi-Unit Dwellings

Bin type	Height	Depth	Width
80 Litre Bin	870mm	530mm	450mm
120 Litre Bin	940mm	560mm	485mm
140 Litre Bin	1065mm	540mm	500mm
240 Litre Bin	1080mm	735mm	580mm

Note: These dimensions are only a guide and differ slightly according to manufacturer, if bins have flat or dome lids and are used with different lifting devices.

Multi Unit Housing Development and Residential Flat Buildings

- C9** The following minimum collection and storage facilities must be provided and identified on the SWMMP:
- (i) Each dwelling unit should be provided with an indoor waste/recycling cupboard (or other appropriate storage space) for the interim storage of a minimum one day's garbage and recycling generation;
 - (ii) Residential flat buildings and multi unit housing must include communal waste/recycling storage facilities in the form of a waste/recycling storage room (or rooms);
 - (iii) Space must be provided for an individual compost container for each dwelling (such as in townhouse and villa developments) or for a communal compost container; the siting of which will have regard to potential amenity impacts; and
 - (iv) The waste/recycling storage area(s) or room(s) must be of a size that can comfortably accommodate separate garbage, recycling and garden waste containers at the rate of Council provision.
- C10** Plans submitted with a Development Application must show:
- (i) The location of an indoor waste/recycling cupboard (or other appropriate storage space) for the interim storage of a minimum one day's garbage and recycling generation for each dwelling;
 - (ii) The location of individual waste/recycling storage areas (such as for townhouses and villas) or a communal waste/recycling storage room(s) able to accommodate Council's waste, recycling and garden waste bins designed; and
 - (iii) The location of any garbage chute(s).
- C11** The following location and design criteria is required:
- (i) Garbage chutes must be designed in accordance with **Part 3N.5.3 - Garbage Chutes**. Garbage chutes are not suitable for recyclable materials and must be clearly labeled to discourage improper use. Alternative interim disposal facilities for recyclables should be provided at each point of access to the garbage chute system;
 - (ii) Waste/recycling storage rooms must be constructed in accordance with the requirements of the Building Code of Australia (BCA);
Location & Appearance
 - (iii) Waste/recycling storage rooms must be integrated into the design of the overall development. It is preferable that such rooms be located behind the front building line. Wherever possible, the room should be in a basement location within the main building envelope (rather than a separate stand-alone structure). Materials and finishes visible from outside should be similar in style and quality to the external materials used in the rest of the development;
 - (iv) Minimise adverse impacts associated with:
 - a) The proximity of the room to any dwellings;
 - b) The visibility of the room;

- c) Noise generated by any equipment located within the room;
 - d) Noise generated by the movement of bins into and out of the room;
 - e) Noise generated by collection vehicles accessing the site; and
 - f) Odours emanating from the room;
- (v) Each service room and storage area must be located for convenient access by users and must be well ventilated and well lit;

Size

- (vi) Waste/recycling storage rooms must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development;
- (vii) The gradient of waste/recycling storage room floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements;
- (viii) Communal waste storage areas should have adequate space to accommodate and manoeuvre the Council's required number of waste and recycling containers;

Layout & Design

- (ix) Within waste/recycling storage rooms, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers — so that the potential for contamination of recyclable materials is minimised;

Access

- (x) There must be an unobstructed and Continuous Accessible Path of Travel (as per Australian Standard 1428 Design for Access and Mobility - 2001) and free of steps and kerbs from the waste/recycling storage area(s) or room(s) to:
 - a) The entry to any Adaptable Housing (as per Australian Standard 4299 Adaptable Housing - 1995);
 - b) The principal entrance to each residential flat building; and
 - c) The point at which bins are collected/emptied.

Note: In instances where a proposal does not comply with these requirements, Council will consider alternative proposals that seek to achieve a reasonable level of access to waste/recycling storage area(s) or room(s);

- (xi) Should a collection vehicle be required to enter a property, access driveways and internal roads must be designed in accordance with Australian Standard 2890.2 Parking Facilities – Off-Street Commercial Vehicle Facilities – 2002;
- (xii) For development with fewer than 20 dwellings, bins may be collected from a kerbside location. The kerbside bin holding location must be temporary and must not impede pedestrian or vehicle access;
- (xiii) For development with 20 or more dwellings, bins must be collected onsite and are to be collected either from their usual storage point or from an onsite temporary holding area located inside the property boundary and close to a property entrance;
- (xiv) Where onsite access is required, the development must be designed to allow for access by garbage collection vehicles in accordance with the limiting dimensions of a Medium Rigid Vehicle (MRV) stipulated by AS 2890.2; and

(xv) The collection vehicles must enter and exit the site in a forward direction and not impede general access to, from or within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.

C12 The SWMMP must ensure the following management responsibilities are complied with:

- (i) Agents of the owners' corporation must take responsibility for the management of waste and recyclable materials generated upon the site; and
- (ii) Arrangements must be in place in regards to the management, maintenance and cleaning of all waste/recycling management facilities.

C13 Council will require indemnity against claims for loss or damage to the pavement or other driving surface. Council may also require indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service. In all cases, a hazard assessment will need to be conducted prior to Council agreeing to undertake the service.

C14 If Council waste collectors and/or waste collection vehicles are required to enter a site for the purpose of emptying bins, then site specific arrangements must be in place.

C15 If bins need to be moved from normal storage areas to a different location for collection purposes, it is the responsibility of agents of the owners' corporation to move the bins to the collection point no earlier than the evening before collection day and to then return the bins to their storage areas no later than the evening of collection day. Bins are to remain in their on-site storage areas at all other times.

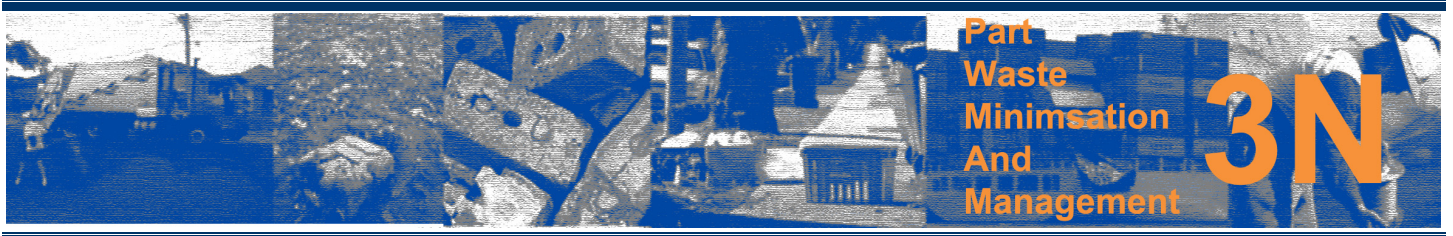
C16 Residents must have access to a cold water supply for the cleaning of bins at:

- (i) The entry to any Adaptable Housing (as per Australian Standard 4299 Adaptable Housing - 1995);
- (ii) The principal entrance to each residential flat building; and
- (iii) The point at which bins are collected/emptied.

C17 Developments containing more than three (3) habitable storeys must:

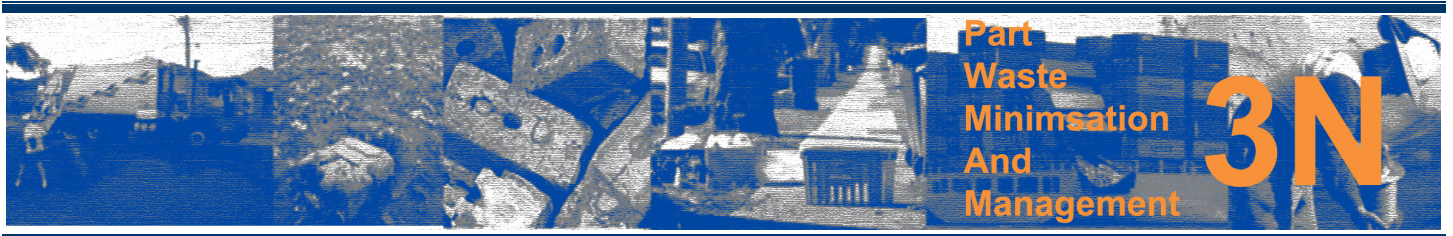
- (i) Provide a system for convenient transportation of waste and recyclable material to the communal waste and recycling storage area; and
- (ii) Provide a waste and recycling compartment/area on each floor with sufficient capacity to store at least 1 day volume of waste and recycling likely to be generated on that floor.

C18 Developments containing four (4) or more storeys must provided garbage chute(s) and interim storage facilities for recyclable materials and a service rooms (for accessing a garbage chute) on each floor of the building.



C19 For multi-storey developments that include ten (10) or more dwellings, a room or caged area with a minimum volume of 4m³ must be allocated for the storage of discarded bulky items, such as old furniture, awaiting council pick up.

C20 Waste and recycling bins/crates must be stored together.



3N.3.3 Commercial, Industrial and Other Non-Residential Development

Objectives

- O1** To ensure the storage, amenity and management of waste is sufficient to meet the needs of non-residential development; and
- O2** To ensure waste from within non-residential development can be collected and disposed in a manner that is healthy, efficient and minimise disruption to amenity.

Controls

- C1** Waste and recycling storage areas must be located in a position convenient for both users and waste collection personnel.
- C2** The following minimum collection and storage facilities must be provided and identified on the SWMMP:
 - (i) A waste service compartment (waste and recycling area) on each floor of the building and have sufficient capacity to store at least 1 days volume of waste and recycling likely to be generated on that floor;
 - (ii) Sufficient space allocated on site for the storage of reusable items such as crates and pallets;
 - (iii) Separate space for the storage of liquid wastes and oils etc. The liquid waste storage areas must be undercover, bunded and drained to a grease trap; and
 - (iv) Adequate storage for waste to accommodate future change of uses including grease traps is to be provided;
 - (v) Provisions for all parts of the development to move recyclable materials and general waste to the main waste/recycling storage room/area. For multiple storey buildings, this might involve the use of a goods lift;
 - (vi) A waste/recycling storage room/area to accommodate bins that are of sufficient volume to contain the quantity of waste generated (at the rate described in **Table 2**);
 - (vii) Standard and consistent signage on how to use the waste management facilities is to be clearly displayed;
 - (viii) Separate containers for the separation of recyclable materials from general waste. The type and volume of containers used to hold waste and recyclable materials must be compatible with the collection practices of the nominated waste contractor; and
 - (ix) Be capable of accommodating reasonable future changes in use of the development.

C3 Plans submitted with a Development Application must show:

- (i) The location of the designated waste and recycling storage room(s) or areas, sized to meet the waste and recycling needs of all tenants;
- (ii) The location of temporary waste and recycling storage areas within each tenancy;
- (iii) An identified collection point for the collection and emptying of waste, recycling and garden waste bins;
- (iv) The path of travel for moving bins from the storage area to the identified collection point (if collection is to occur away from the storage area); and
- (v) The on-site path of travel for collection vehicles (if collection is to occur on-site).

C4 The following location and design criteria is required:

- (i) Waste/recycling storage rooms must be constructed in accordance with the requirements of the Building Code of Australia (BCA);
- (ii) Waste/recycling storage areas must be serviced by hot and cold water provided through a centralised mixing valve. The hose cock must be protected from the waste containers and must be located in a position that is easily accessible when the area is filled with waste containers;
- (iii) Garbage chutes must be designed in accordance with **Part 3N.5.3 - Garbage Chutes**. Garbage chutes are not suitable for recyclable materials and must be clearly labeled to discourage improper use. Alternative interim disposal facilities for recyclables should be provided at each point of access to the garbage chute system;

Location & Appearance

- (iv) Waste/recycling storage areas must be integrated into the design of the overall development. Materials and finishes that are visible from outside should be similar in style and quality to the external materials used in the rest of the development;
- (v) Minimise adverse impacts associated with:
 - (a) The proximity of the area to dwellings;
 - (b) The visibility of the area;
 - (c) Noise generated by any equipment located within the area;
 - (d) Noise generated by the movement of bins into and out of the area;
 - (e) Noise generated by collection vehicles accessing the site; and
 - (f) Odours emanating from the area;

Size

- (vi) Waste/recycling storage areas must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development;
- (vii) Waste/recycling storage areas must be able to accommodate separate general waste bins and recycling bins which are of sufficient volume to contain the quantity of waste generated (at the rate described in Table 2) between collections;
- (viii) A waste/recycling cupboard for each and every kitchen area in a development, including kitchen areas in hotel rooms, motel rooms and staff food preparation areas. Each

waste/recycling cupboard must be of sufficient size to hold a minimum of a single day's waste and to hold separate containers for general waste and recyclable materials;

- (ix) Temporary waste and recycling storage areas must be of a sufficient size to store a minimum of one day's worth of waste within each tenancy;
- (x) Depending upon the size and type of the development, it may be necessary to include a separate waste/recycling storage room/area for each tenancy;

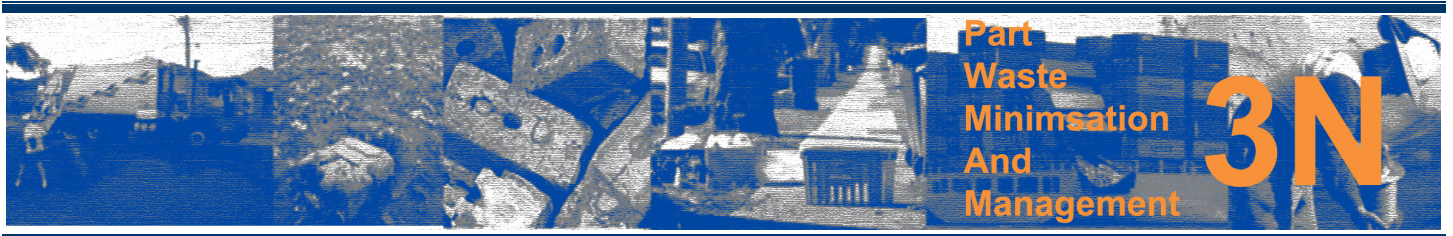
Layout & Design

- (xi) The gradient of waste/recycling storage area floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements;
- (xii) Within waste/recycling storage areas, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers, so that the potential for contamination of recyclable materials is minimized;
- (xiii) Servicing arrangements for the emptying of bins must be compatible with the operation of any other loading/unloading facilities on-site;
- (xiv) Vermin must be prevented from entering the waste/recycling storage area;
- (xv) Waste/recycling storage areas must have a smooth, durable floor and must be enclosed with durable walls/fences that extend to the height of any containers which are kept within;
- (xvi) Doors/gates to waste/recycling storage areas must be durable. With a sign adjacent to the door/gate that indicates that the door/gate is to remain closed when not in use. All doors/gates are to be openable from both inside and outside the storage area and must be wide enough to allow for the easy passage of waste/recycling containers;
- (xvii) Signage that clearly describes the types of materials that can be deposited into recycling bins and general garbage bins;
- (xviii) The floor must be graded so that any water is directed to Sydney Water approved drainage connection located upon the site;

Access

- (xix) The development must allow access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured to allow collection vehicles to enter and exit the site in a forward direction and so collection vehicles do not impede general access to, from and within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles;
- (xx) Convenient access from each tenancy to the waste/recycling storage area(s). There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage area(s);
- (xxi) Where possible, waste/recycling containers should be collected from a rear lane access point. Consideration should be given to the time of day at which containers are collected so as to minimise adverse impacts upon residential amenity, pedestrian movements and vehicle movements; and
- (xxii) Should a collection vehicle be required to enter a property, access driveways and internal roads must be designed in accordance with Australian Standard 2890.2 Parking Facilities - Off-Street Commercial Vehicle Facilities - 2002.

- C5** The SWMMP must ensure the following management responsibilities are complied with:
- (i) Arrangements must be in place so that the waste/recycling storage area is not accessible to the general public; and
 - (ii) Arrangements must be in place for the regular maintenance and cleaning of waste/recycling storage areas. Waste/recycling containers must only be washed in an area which drains to Sydney Water approved drainage connection.
- Note:** The Better Practice Guide for Waste Management in Multi-Unit Dwellings gives detailed information about waste recycling/storage rooms and facilities. The Guide was substantially reviewed in 2007 and is available on the Department of Environment and Climate Change NSW website (www.environment.nsw.gov.au). Further updates will be published as further information from social research and waste stream audits becomes available.
- C6** All commercial tenants must keep written evidence on site of a valid contract with a licensed waste contractor for the regular collection and disposal of the waste and recyclables that are generated on site.
- C7** Between collection periods, all waste/recyclable materials generated on site must be kept in enclosed bins with securely fitting lids so the contents are not able to leak or overflow.
- C8** Bins must be stored in the designated waste/recycling storage room(s) or area(s).
- C9** Premises which generate at least 50 litres per day of food waste or whose waste contain 20% of their or more of food waste must have that waste collected on a daily basis or must store that waste in a dedicated and refrigerated waste storage area until collection.
- C10** Liquid waste from grease traps must only be removed by licensed contractors approved by Sydney Water and NSW EPA.
- C11** The waste and recycling management (including composting) and collection system, along with allocated responsibilities should be clearly outlined in contracts with cleaners, building managers and tenants.
- C12** Production, storage and disposal of hazardous wastes must comply with all relevant legislation.



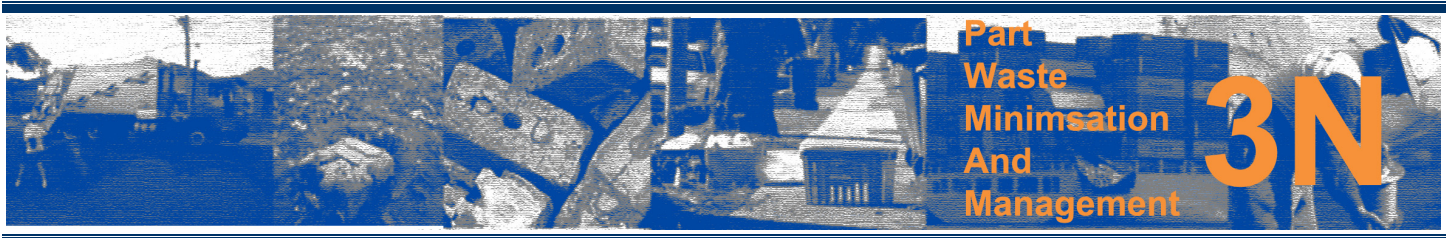
3N.3.4 Mixed Use Development

Objectives

- O1** To ensure the storage, amenity and management of waste is sufficient to meet the needs of mixed use development; and
- O2** To ensure waste from within mixed use development can be collected and disposed of in a manner that is healthy, efficient and minimise disruption to amenity.

Controls

- C1** Noise and odour generated from the storage and collection of waste generated from the commercial component of development must not impact on residents in the same site.
- C2** Residential units must be insulated from noise if adjacent or above the waste and recycling storage facility, compaction equipment or collection and vehicle access points.
- C3** Separate and self-contained waste management systems for the residential component and the non-residential component must be provided. In particular, the development must incorporate separate waste/recycling storage rooms/areas for the residential and non-residential components. Commercial tenants must be prevented (via signage and other means), from using the residential waste/recycling bins and vice versa.
- C4** The residential waste management system and the non-residential waste management system must be designed so that they can efficiently operate without conflict. Conflict may potentially occur between residential and non-residential storage, collection and removal systems, and between these systems and the surrounding land uses. For example, collection vehicles disrupting peak residential and commercial traffic flows or causing noise issues when residents are sleeping.



3N.4 Appendicies

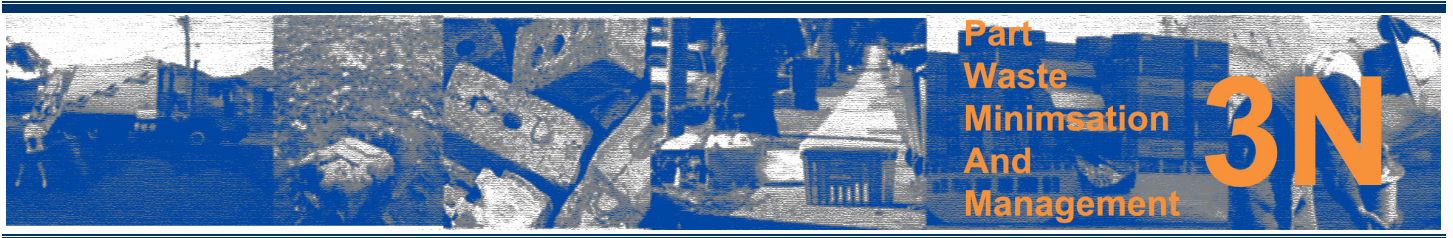
3N.4.1 Model Site Waste Minimisation and Management Plan

3N.4.1.1 Part 1 – Demolition / Construction: Model Site Waste Minimisation and Management Plan

Source: Marrickville DCP 2011

GENERAL REQUIRMENTS
<p>Site Address:</p> <p>.....</p>
<p>Proposed Development:</p> <p>.....</p>
<p>Applicant(s) Name:</p>
<p>Applicant Telephone Number:</p>
<p>The information provided on this Recycling and Waste Management Plan - Part 1 and the accompanying plans provides and accurate indication of the manner in which recyclable/waste materials are to be managed.</p> <p>Applicants(s) Signature:</p> <p>Date:</p>
PLANS
<p>The Recycling and Waste Management Plan Part 1 must be accompanied by plans which show:</p> <ul style="list-style-type: none"> ▪ The location of areas that will be used for the sorting of demolition and construction recyclables/waste; ▪ The location of areas that will be used for the storage of demolition and construction recyclables/waste, including the location of any associated waste containers/skip bins; and ▪ The point at which vehicles removing demolition and construction recyclables/waste will access the site.
REUSE / RECYCLE / DISPOSAL

MATERIALS ON SITE		DESTINATION		
		Re-use and recycling		Disposal
Type of Material	Estimated volume (m ³ or tonnes)	On-Site reuse & recycling (specify proposed on-site reuse & recycling methods)	Off-site reuse & recycling (specify contractor and/or recycling outlet)	Off-site disposal (specify contractor & landfill site)
Excavation material				
Green waste (organic)				
Bricks				
Concrete				
Timber – specify type				
Plasterboard				
Metals – specify type				
Tiles – specify type				
Other (such as light fittings, kitchen or bathroom fittings)				
<p>Note: Documentation (including receipts) regarding the destination and disposal method of material/waste leaving the site must be retained by the applicant. Council may wish to audit such documentation so as to monitor compliance with the Recycling and Waste Management Plan.</p>				



3N.4.1.2 Part 2 – Ongoing use of Premises: Model Site Waste Minimisation and Management Plan

Source: Marrickville DCP 2011

GENERAL DETAILS	
Site Address:	
.....	
Proposed Development:	
.....	
Applicant Name :	
Applicant Telephone Number:	
The information provided on this Recycling and Waste Management Plan - Part 2 and the accompanying plans provides and accurate indication of the manner in which recyclable/waste materials is to be managed.	
Applicants(s) Signature:.....	
Date:	
Number of proposed dwellings:	
Number of proposed commercial/industrial tenancies:	
Total industrial/ commercial floor area m ²
RESIDENTIAL FLAT BUILDINGS, MULTI UNIT HOUSING & RESIDENTIAL COMPONENT OF MIXED USE BUILDINGS	
General Waste	
Number of Council 240 or 120 litre general waste bins to be accommodated on site: x 240L x 120L
Recyclable Materials	
Number of Council 240 or 120 litre recycling bins to be accommodated on site: x 240L x 120L
Green Waste Materials	
Number of Council 240 or 120 litre recycling bins to be accommodated on site: x 240L x 120L

Alternative Types of Bins

Where alternative types of bins greater than 360L (ie skip bins) are desired:

Size and number of skip bins: X L X L X L
Skip bins for general waste: X L X L
Skip bins for recycling: X L X L
Skip bins for green waste: X L X L

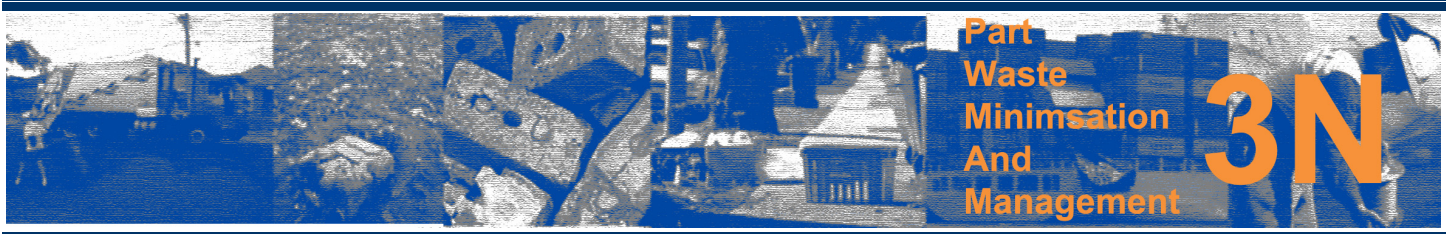
NON – RESIDENTIAL DEVELOPMENT ONLY

General Waste

Type of General Waste (specify types)	Volume (m ³ or L) per week	On-site storage/treatment arrangements	Method of Disposal

Recyclable Materials

Type of General Waste (specify types)	Volume (m ³ or L) per week	On-site storage/treatment arrangements	Method of Disposal



WASTE MANAGEMENT PRACTICES IN ALL DEVELOPMENT TYPES

If applicable, describe arrangements and responsibilities for moving bins from their usual storage area to the place at which they are to be emptied:

--

Describe arrangement and responsibilities for cleaning bins, waste storage room/areas, and other waste management facilities:

--

Describe arrangements and responsibilities for maintain waste storage rooms/areas (including signage) and other waste management facilities:

--

Describe arrangement for educating staff)in non-residential development) and contractors of on-site waste management practices:

--

Describe other waste management practices relating to the ongoing use of the premises:

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3N.4.2 Garbage Chutes

Garbage Chute Design

Garage chutes must be designed in accordance with the following:

- (i) The Building Code of Australia (BCA);
- (ii) Located and insulated in a manner that reduces noise impacts;
- (iii) Chutes, service openings and charging devices must be constructed of material (such as metal) that is smooth, durable, impervious, non-corrosive and fire resistant;
- (iv) Chutes, service openings and charging devices must be capable of being easily cleaned;
- (v) Chutes must be cylindrical and should have a diameter of at least 500mm;
- (vi) There must not be any bends (or sections of reduced diameter) in the main shaft of the chute;
- (vii) Internal overlaps in the chute must follow the direction of waste flow;
- (viii) Chutes must deposit rubbish directly into a bin or compactor located within a waste/recycling storage room;
- (ix) A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced;
- (x) The upper end of a chute should extend above the roofline of the building; and
- (xi) The upper end of a chute should be weather protected in a manner that doesn't impede the upward movement of air out of the chute.

Garbage chute service room must be designed in accordance with the following:

- (i) The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room;
- (ii) The charging device for each service opening must be self-closing and must not project into the main chute.
- (iii) Branches connecting service openings to the main chute are to be no more than 1metre long;
- (iv) Each service room must include containers for the storage of recyclable materials. Signage regarding the materials that can be recycled should be displayed near these containers;
- (v) Each service room must be located for convenient access by users and must be well ventilated and well lit;
- (vi) The floors, walls and ceilings of service rooms must be finished with smooth, durable materials that are capable of being easily cleaned; and
- (vii) Service rooms must include signage that clearly describes the types of materials that can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins.

Management of Garbage Chutes

Garbage chutes are to be managed in accordance with the following:

- (i) Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings;
- (ii) Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices; and
- (iii) Arrangements must be in place for the regular transferral of recyclable materials (which are stored in service rooms) to the main waste/recycling storage.

