

**Woollahra  
Municipal  
Council**

**Annexure 10  
DA Guide**

# **Site Waste Minimisation and Management**

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**Guide for preparing  
site waste minimisation and management plans**

April 2011





## 1. Preliminary note

Waste and resource consumption is a major environmental issue and a priority for all levels of government within Australia. This is particularly the case as landfill sites become scarce and the environmental and economic costs of waste generation and disposal rise. Government and society alike are exposed to the issue of managing the increasingly large volumes of waste generated by our society.

Sustainable resource management and waste minimisation has emerged as a priority action area and a key in the quest for Ecologically Sustainable Development (ESD). Critical actions in this regard include the following (moving from most desirable to least desirable):

- avoiding unnecessary resource consumption
- recovering resources for reuse
- recovering resources for recycling or reprocessing
- disposing of residual waste (as a last resort).

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.

Effective waste planning and management can also benefit the builder/developer. Some of the benefits of good waste planning and management include:

- reduced costs
- improved workplace safety
- enhanced public image
- compliance with legislation such as the Protection of the Environment Operation Act 1997 that requires waste to only be transported to a place that can lawfully accept it.

This Guide is to complement the Site Waste Minimisation and Management Development Control Plan 2010 (Waste Not DCP). The Waste Not DCP covers all aspects of waste minimisation not just the requirements for the submission of a DA. The Waste Not DCP is modelled on the *Model Waste Not DCP Chapter 2008* prepared by the Department of Environment and Climate Change (DECC). This model DCP can be accessed on the DECC web site at:

<http://www.environment.nsw.gov.au/resources/warr/08353SiteWasteMin2.pdf>

## 2. What is the purpose of this Guide?

The purpose of this guide is to assist those people who are intending make a development application to include relevant information regarding measures proposed to minimise and manage waste. This applies to all types of development, including waste associated with demolition, construction and ongoing operations.

## 3. What information is required?

All applications for development, including demolition, construction and the ongoing use of a site/premise, must be accompanied by a Site Waste Minimisation and Management Plan (SWMMP). This may form part of the Statement of Environmental Effects (SEE) or it may be submitted as a separate document.

In addition to submission of a SWMMP, the waste management facilities proposed as part of the development shall be clearly illustrated on the plans of the proposed development which accompany the development application (DA).

### **3.1 SWMMPs**

A SWMMP outlines measures to minimise and manage waste generated during:

- demolition
- construction
- ongoing use of the site/premises.

In doing so, the SWMMP nominates:

- volume and type of waste and recyclables to be generated
- storage and treatment of waste and recyclables on site
- disposal of residual waste and recyclables
- operational procedures for ongoing waste management once the development is complete.

The SWMMP highlights the method of recycling or disposal and the waste management service provider.

The **Attachment A** to this guide provides a template for the compilation of a SWMMP.

### **3.2 Submission of a SWMMP**

A SWMMP must be submitted for all types of development including demolition, construction and ongoing use of the site/premises including local development, integrated development and state significant/major project development (as defined by the *Environmental Planning and Assessment Act and Amendments*). More details are required in SWMMPs for larger and more complex developments. The amount of supporting information and diagrams also increases.

Where a DA is required, with or without the need for a Construction Certificate (CC), a SWMMP must be submitted at development application stage. . An exception may be allowed where both a DA and CC are required for a particular development. In those cases a preliminary SWMMP<sup>1</sup> will be required with the DA and the final SWMMP details relating to the demolition and construction phases may be submitted to Council for approval prior to the CC being issued. Maximum waste minimisation and management benefits are achieved when the SWMMP is considered from the earliest stages of the development. It is for this reason that it is preferable that a SWMMP is part of the earliest approval application.

## **4. Requirements for waste storage and collection**

### **4.1 Facilities for waste storage and collection in residential developments**

The arrangement of the waste storage areas must be illustrated on the drawings submitted with the DA. Details of facilities for waste storage and collection must be

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<sup>1</sup> A Preliminary SWMMP need not include details for Demolition (All Types of Development) and Construction (All Types of Development) regarding Reuse Recycling Disposal of wasted generated, see Attachment A, pages 2 and 3.

submitted to the accredited certifier prior to issue of a CC. Waste Storage Areas must meet the following requirements:

#### **4.1.1 Single Dwellings, Semi Detached and Dual Occupancy (all areas except Paddington and West Woollahra)**

Within the property boundaries, there must be provision for:

- One 120L red-lid mobile garbage bin for residual waste
- One 55L crate for paper recyclables (blue)
- One 55L crate for container recyclables (black)
- One 240L green-lid mobile garbage bin for food and garden organics

#### **4.1.2 Single Dwellings, Semi Detached and Dual Occupancy in Paddington and West Woollahra**

Within the property boundaries, there must be provision for:

- One 120L mobile garbage bin or up to two 55L garbage bins for putrescible waste
- One 55L crate for paper recyclables (blue)
- One 55L crate for container recyclables (black)
- One 55L crate for garden organics (green)

#### **4.1.3 Multi Unit Developments (including High Rise, Town Houses, Villas and the residential component of Mixed-Use Developments)**

Communal waste storage areas to house bins are required for all multi unit dwellings. The waste storage areas may be internal rooms, external enclosures or a mix of both.

Mixed-use developments contain residential and commercial components. The waste storage area with bins for the residential component must be separate to the waste storage area provided for the commercial component.

The waste storage areas for multi unit developments must be sufficiently sized so as to comfortably accommodate:

- 120 litres of residual waste per residential dwelling stored in either 120L bins or 240L shared use bins. Bulk bins may be used subject to conditions – see S4.
- 55 litres of recyclables per residential dwelling stored in colour coded, shared use, 120L and/or 240L mobile garbage bins.
- 240L shared use mobile garbage bins for food and garden organics (as a guide use one 240L mobile garbage bin per four dwellings).

Indicative sizes/dimensions of bins to assist with construction of waste storage area/room may be found in **Attachment B – Bin Sizes of this Guide**. The full complement of bins must be purchased by the developer prior to residents moving in. The bins must be purchased through Woollahra Council.

The Waste Storage Area/s for multi unit development should meet the following requirements:

- For residential developments between four and seven storeys, a waste storage room can be provided on each floor in addition to the central waste storage area located somewhere at the bottom of the building. In each waste storage room, storage must be provided for putrescible waste in mobile garbage bins and recyclables in colour coded mobile bins or crates.
- For residential developments with seven storeys or more (High Rise Multi Unit Dwellings), a waste storage room is required on each floor. In each room, storage

must be provided for putrescible waste in mobile garbage bins and recyclables in colour coded mobile bins or crates.

- Putrescible waste and recycling from the waste storage rooms will either be transferred by a caretaker to the central waste storage area or by garbage chute installed for putrescible waste only. Chutes are not suitable for recyclable materials, therefore recycling will still require manual separation and handling by a caretaker. More information on chute systems can be found in the *Better Practice Guide for Waste Management in Multi-unit Dwellings* on the Department and Environment & Climate Change website [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)
- Residents must not be required to wheel bins a distance greater than 75m from the waste storage area to the collection point (usually the kerb) for collection. For development applications assessed using State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 the maximum distance is 50m.
- Waste storage areas must be located in positions that permit easy transfer of bins to collection point (kerbside), convenient access for users, are secure from vandalism and well screened for visual amenity.

The interior of the Waste Storage Area/s must meet the following requirements:

- Bins are to be stored with their lids closed to prevent vermin from entering.
- The area must be constructed with a smooth impervious floor graded to a floor waste and provided with a tap and hose to facilitate regular cleaning of the bins. A waste storage area that is located internal to the building must be fitted with both a hot and cold water supply and hose cocks. Waste water must be discharged to the sewer in accordance with the requirements of Sydney Water.
- Walls and ceilings of the waste storage area must be constructed of an impervious material with a smooth finish. The junction between the walls and the floor must be coved with a minimum radius of 25mm to prevent the accumulation of waste matter.
- The waste storage area must be well lit with waterproof fittings to enable use at night. A timer switch must be fitted to ensure the light is turned off after use.
- Odour problems need to be minimised by good ventilation. The waste storage area must be located away from habitable areas.
- Air-conditioned waste storage areas to be provided with a separate air-conditioning system to residential units.
- For developments of four storeys and above, all waste storage areas must be fitted with fire sprinklers and be rated to fire safety standards in accordance with the Building Code of Australia.
- Both putrescible and recycling bins/crates must be stored together. Putrescible bins must be located closest to the entrance to the waste storage area.
- Instructions on the correct use of the waste management system and what materials may be recycled must be posted in the communal waste areas. Signage can be obtained from Council's Waste Services section.

#### **4.2 Facilities for waste storage and collection in Commercial Developments (Shops, Offices, Food Premises, Hotels, Motels, Licensed clubs, Education Establishments, Entertainment Facilities and Hospitals)**

The arrangement of the waste storage areas must be illustrated on the drawings submitted with the Development Application. Details of facilities for waste storage and

collection must be submitted to the accredited certifier prior to issue of a Construction Certificate.

Prior to commencement of use, a Trade Waste Collection Agreement must be entered into with an appropriate operator. Evidence of the agreement must be provided to Council's Compliance Section, with a copy to Council's Depot and Waste Services Department.

The waste storage area must be sufficiently sized so as to store the waste generated by the proposed use with the allowance for separation of putrescible waste from recyclables. The size of the waste storage areas should be informed by **Attachment C – Waste Generation and Recycling Rates**, of this Guide and the *Better Practice Guide for Waste Management in Multi-unit Dwellings* on the Department and Environment & Climate Change website [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

The following requirements must be met:

a) Bulk Bins

Where bulk bins are to be provided they must be able to be manually manoeuvred by one person in order to be serviced. Adequate access for garbage trucks must be provided. Access to the waste service areas must be designed in accordance with Australian Standard 2890.2 – 1989 Off-street parking Part 2: Commercial Vehicle Facilities.

Particular attention must be paid to the grade of the access road, vertical clearance, driveway width and manoeuvring area.

b) The Waste Storage Area

The design of the Waste Storage Area must meet the following requirements:

- The area must be fully enclosed.
- Bins are to be stored with lids closed to prevent vermin from entering.
- Walls and ceilings of the waste storage area must be constructed of an impervious material with a smooth finish. The junction between the walls and the floor must be coved with a minimum radius of 25mm to prevent the accumulation of waste matter.
- The area must be constructed with a smooth impervious floor graded to a floor waste and provided with a tap and hose to facilitate regular cleaning of the bins. A waste storage area that is located internal to the building must be fitted with both a hot and cold water supply and hose cocks. Waste water must be discharged to the sewer in accordance with the requirements of Sydney Water.
- The waste storage area must be well lit using waterproof fittings to enable use at night. A timer switch must be fitted to the light fitting to ensure the light turns off after use.
- Odour problems need to be minimised by good ventilation. The waste storage area must be located away from the windows of habitable rooms.
- For developments of four storeys and above, waste storage areas and rooms must be fitted with fire sprinklers and be rated to fire safety standards in accordance with the Building Code of Australia.
- Both putrescible and recycling bins/crates must be stored together. Putrescible bins must be located closest to the entrance to the waste storage area.

- Instructions on the correct use of the waste management system and what materials may be recycled must be posted in the communal waste storage cupboard/room or bin bay.

### **4.3 Clinical Waste**

Medical wastes must be disposed of by an authorised hazardous waste disposal contractor. Storage and safe disposal of medical waste must comply with requirements listed in the document titled “Waste Management Guidelines for Health Care Facilities” published by NSW Health in August 1998.

### **4.4 Bulk Bins**

Bulk putrescible garbage bins will only be permitted for residential developments containing 12 or more dwellings. The bulk bins must be able to be manually manoeuvred by one person in order to be serviced. Adequate off-street access for garbage trucks must be provided. Access to the service area must be designed in accordance with Australian Standard 2890.2–1989 *Off-street parking Part 2: Commercial Vehicle Facilities*. Particular attention must be paid to the grade of the access road, vertical clearance, driveway width and manoeuvring area.

### **4.5 Garbage Compaction**

For residential developments containing 20 or more residential dwellings, a garbage compaction unit is required. For developments containing 16–20 residential dwellings, a garbage compaction unit is encouraged.

## Attachment A: Site Waste Minimisation and Management Plan Template

<b>Applicant and Project Details (All Developments)</b>	
<b>Applicant Details</b>	
Application No.	
Name	
Address	
Phone number(s)	
Email	
<b>Project Details</b>	
Address of development	
Existing buildings and other structures currently on the site	
Description of proposed development	
<p><i>This development achieves the waste objectives set out in the Council's DA Guide. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as council, DECC or Work Cover NSW.</i></p>	
Name	
Signature	
Date	

## Demolition (All Types of Developments)

Address of development: \_\_\_\_\_

most favourable



least favourable

	Reuse	Recycling	Disposal	
<b>Type of waste generated</b>	<b>Estimate Volume (m<sup>3</sup>) or Weight (t)</b>	<b>Estimate Volume (m<sup>3</sup>) or Weight (t)</b>	<b>Estimate volume (m<sup>3</sup>) or Weight (t)</b>	<b>Specify method of on site reuse, contractor and recycling outlet and/or waste depot to be used</b>
Excavation material				
Timber (specify)				
Concrete				
Bricks/pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste e.g. asbestos (specify)				
Other (specify)				

**Construction (All Types of Developments)**

**Address of development:** \_\_\_\_\_

most favourable



least favourable

	<b>Reuse</b>	<b>Recycling</b>	<b>Disposal</b>	
<b>Type of waste generated</b>	<b>Estimate Volume (m<sup>3</sup>) or Weight (t)</b>	<b>Estimate Volume (m<sup>3</sup>) or Weight (t)</b>	<b>Estimate volume (m<sup>3</sup>) or Weight (t)</b>	<b>Specify method of on site reuse, contractor and recycling outlet and/or waste depot to be used</b>
Excavation material				
Timber (specify)				
Concrete				
Bricks				
Tiles				
Metal (specify)				
Glass				
Plasterboard (offcuts)				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste (specify)				

**Ongoing Operation (Residential, Multi Unit, Commercial and Mixed Use)**

**Address of development:** \_\_\_\_\_

Show the total volume of waste expected to be generated by the development and the associated waste storage requirements.

	<b>Recyclables</b>		<b>Compostables</b>	<b>Residual waste*</b>	<b>Other</b>
	<b>Paper/ cardboard</b>	<b>Metals/plastic/ glass</b>			
Amount generated (L per unit per day)					
Amount generated (L per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number and size of storage bins required					
Floor area required for storage bins (m <sup>2</sup> )					
Floor area required for manoeuvrability (m <sup>2</sup> )					
Height required for manoeuvrability (m)					

\* Current “non-recyclables” waste generation rates typically include food waste that might be further separated for composting.



## Plans and Drawings (All Developments)

The following checklists are designed to help ensure SWMMPs are accompanied by sufficient information to allow assessment of the application.

Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclables during:

- demolition
- construction
- ongoing operation

### Demolition

Refer to Section 3.1 of the Waste Not DCP for specific objectives and measures.

Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

### Construction

Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

## Ongoing Operation

Do the site plans detail/indicate:

	Tick Yes
<b>Space</b>	
Size and location(s) of waste storage areas	
Recycling bins placed next to residual waste bins	
Space provided for access to and the manoeuvring of bins/equipment	
Any additional facilities	
<b>Access</b>	
Access route(s) to deposit waste in storage room/area	
Access route(s) to collect waste from storage room/area	
Bin carting grade	
Location of final collection point	
Clearance, geometric design and strength of internal access driveways and roads	
Direction of traffic flow for internal access driveways and roads	
<b>Amenity</b>	
Aesthetic design of waste storage areas	
Signage – type and location	
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc)	

## Attachment B: Bin Sizes

Bin type	Height	Length	Width
55L crate	330mm	510mm	420mm
55L bin (Paddington/West Woollahra only)	560mm	450mm	450mm



**Paper/cardboard  
recycling crate**



**Mixed container  
recycling crate**



**55L garbage bin  
(Paddington & West Woollahra only)**

Bin type	Height	Depth	Width
120L MGB	940mm	560mm	485mm
240L MGB	1,080mm	735mm	580mm
660L MGB (bulk bin)	1,250mm	850mm	1,370mm

**120L garbage bin**



**Plastics and cans**

**240L food and garden organics bin**



**Glass**

**Paper/cardboard**



**Colour coded recycling bins for multi unit dwellings**

## Attachment C: Waste and Recycling Generation rates

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 <sup>2</sup> floor area/day	Variable
Delicatessen	80L/100m <sup>2</sup> floor area/day	Variable
Fish Shop	80L/100m <sup>2</sup> floor area/day	Variable
Greengrocer	240L/100m <sup>2</sup> floor area/day	120L/100m <sup>2</sup> floor area/day
Restaurant/Café	10L/1.5m <sup>2</sup> floor area/day	2L/1.5m <sup>2</sup> floor area/day
Supermarket	240L/100m <sup>2</sup> floor area/day	240L/100m <sup>2</sup> floor area/day
Takeaway food shop	80L/100m <sup>2</sup> floor area/day	Variable
Hairdresser, Beauty Salon	60L/occupant space/week	Variable
Hotel, Licensed Club, Motel	5L/bed space/day 50L/100m <sup>2</sup> bar area/day 10L/1.5m <sup>2</sup> dining area/day	1L/bed space/day 50L/100m <sup>2</sup> bar area/day 50L/100m <sup>2</sup> dining area/day
Offices	10L/100m <sup>2</sup> floor area/day	10L/100m <sup>2</sup> floor area/day
Shop less than 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day	25L/100m <sup>2</sup> floor area/day
Shop greater than 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day	50L/100m <sup>2</sup> floor area/day
Showroom	40L/100m <sup>2</sup> floor area/day	10L/100m <sup>2</sup> floor area/day

Source: Model Waste Chapter 2008 – Department of Environment & Climate Change