

# Appendix 2 Waste Requirements

## 21 THIRD AVENUE, CONDELL PARK NSW 2200

### 1: Waste Management Plans

A waste management plan must be provided with development applications for all new developments that will generate construction, demolition or ongoing waste. Applicants will need to complete the three forms included in this Appendix.

Applicants should also make reference to the following documents that may provide additional guidance for ensuring that the development achieves the objective of best practice for waste and recycling management.

- NSW EPA, Better Practice Guide for Waste Management in Multi-Unit Dwellings, 2009
- NSW EPA, Better Practice Guidelines for Waste Management and Recycling in Commercial Buildings, 2013

Both publications are available at the NSW Environmental Protection Authority website [www.epa.nsw.gov.au](http://www.epa.nsw.gov.au).

#### Demolition and construction phase

Describe the wastes that will be generated in the demolition and construction phases, and the subsequent separation, storage and disposal of those materials.

Prior to the demolition, alterations and additions or renovation work to any building constructed before 1987, the person responsible for such work must ensure that the building is assessed for hazardous materials, especially asbestos. This assessment should be prepared by a suitably qualified person, such as a contractor licensed by WorkCover, or an occupational hygienist / asbestos consultant that is a member of a relevant industry or professional association. The Waste Management Plan for a building constructed before 1987 must verify the type and amount of asbestos present and the work method proposed for its removal and disposal.

#### Potential for Waste Minimisation

Some examples of avoidance and recycling potential of resources and materials are provided in the following table to assist in preparation of the waste management statement.

Materials On-Site	Waste Avoidance	Reuse and Recycling Potential
Significant trees	Design into new development	Relocated on-site or sold for use off-site
Soil	Avoid excess excavations	Power screened for topsoil
Vegetation from site clearance	Incorporate existing trees/shrubs into the landscape strategy/plan	Mulching, composting, for landscaping/fertiliser
Concrete	Retain existing driveways, paths, footings, slabs in design	Filling, levelling materials, road base
Bricks	Retain existing walls, buildings and fences	Cleaned and/or rendered, crushed.
Roof-tiles	Retain existing roof, colour treatments/ cleaning	Crushed, as landscaping, and driveways
Hardwood beams	Re-use or recycle on site	Fencing, furniture, construction.

Materials On-Site	Waste Avoidance	Reuse and Recycling Potential
Other timber	As above	Formwork, bridging, blocking, propping, construction
Doors, windows, fittings	Design as an architectural feature of the new development	Second-hand building materials
Glass	As above	Sandblasting, aggregate for concrete production
Synthetic and recycled rubber (e.g. under carpets)	Protect/cover and re-use	Safety barriers, speed humps, sports surfaces


Table W.1: Potential for Waste Minimisation

Note: Separated wastes attract reduced or zero disposal fees at licensed disposal facilities

## Waste Management Plan - Part One (Demolition Phase)

**Site Address:** 21 THIRD AVENUE, CONDELL PARK NSW 2200

### Section 1: Asbestos Declaration

	Does Demolition Contain Asbestos?    Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	
	<b>All asbestos waste is to be managed in accordance with provisions of the NSW Work Health and Safety Regulation 2011</b>	
	Is the asbestos friable	<input type="checkbox"/> Yes (go to section 2) <input type="checkbox"/> No
	Is the asbestos non friable and over 10m <sup>2</sup>	<input type="checkbox"/> Yes (go to section 2) <input type="checkbox"/> No
	Is the asbestos non-friable and under 10m <sup>2</sup>	<input type="checkbox"/> Yes (go to section 3) <input type="checkbox"/> No

### Section 2: Asbestos Removal Details

<b>WorkCover Licence No. and Class:</b>	
<b>Demolition Contractor Details:</b>	
<b>Licensed Landfill:</b>	

### Section 3: General Demolition Waste

Type of Material	Estimated Amount (m <sup>3</sup> )	How will you manage this waste?		
		Re-use On-site	Recycle Offsite	Landfill
Bricks	0.9m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete	19.7m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tiles	1.1m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Timber (clean)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timber (treated)	2.0m3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plasterboard	2.2m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Metals	0.2m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Green Waste	0.5m3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Principal Off-Site Recycler</b>		<b>Principal Licensed Landfill Site</b>		
BINGO RECYCLING CENTRE				

## Waste Management Plan - Part Two (Construction Phase)

<b>Site Address:</b> 21 THIRD AVENUE, CONDELL PARK NSW 2200				
<b>Section 1:</b> Estimated Amount of Excavation Material (m³): 1.5m3		<input checked="" type="checkbox"/> Re-use on-site <input type="checkbox"/> Re-use off site (go to section 2) <input type="checkbox"/> Landfill Disposal (go to section 3)		
<b>Section 2:</b> Address if re-used off site:				
<b>Section 3:</b> Name and Address of licensed landfill:				
<b>Section 4:</b> Estimated Construction Material Waste				
Type of Material:	Estimated Amount (m³):	How will you manage this waste?		
		Re-use on-site	Recycle Offsite	Landfill
Bricks	0.3m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete	1.0m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tiles	0.2m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Timber (clean)	0.3m3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timber (treated)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plasterboard	0.2m3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Green Waste	0.2m3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Off-Site Recycling Facilities</b>		<b>Licensed Landfill Site/s</b>		
BINGO RECYCLING CENTRE				
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## Waste Management Plan - Part Three (Ongoing Use)

<b>Site Address:</b> <div style="border: 1px solid black; padding: 2px; display: inline-block;">21 THIRD AVENUE, CONDELL PARK NSW 2200</div>		
<input type="checkbox"/> Residential Flat Building <input type="checkbox"/> Multi Dwelling Houses	<input type="checkbox"/> Boarding House <input checked="" type="checkbox"/> Other <u>SECONDARY DWELLING WITH ATTACHED GARAGE</u>	<input type="checkbox"/> Shop Top Housing <input type="checkbox"/> Non Residential Development
Please complete Sections 1-3		Please complete Sections 1-4

## Section 1: Generation of Waste

RESIDENTIAL						
Number of dwellings	Rubbish generation/week (120L/dwelling)	Allocated rubbish bin size (140L or 240L)	TOTAL number of rubbish bins allocated	Recycling generation/week (80L/dwelling)	Allocated recycling bin size (240L)	TOTAL number of recycling bins allocated
1	200L	240L	1	200L	240L	1
COMMERCIAL (if applicable)						
Premises Type	Rubbish generation/week (Based on type of premises and m <sup>2</sup> , see Appendix 3)	Size and number of rubbish bins	Collection frequency per week	Recycling generation/week (Based on type of premises and m <sup>2</sup> , see Appendix 3)	Size and number of recycling bins	Collection frequency per week

## Section 2: Storage of Waste Bins

1.	Is there sufficient space allocated within each dwelling for one day's waste and recycling?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.	Is there a waste bin storage room/area provided?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	2a - What is the total area of bin storage provided?	2sqm
	2b - Is there sufficient space provided for the allocated rubbish and recycling bins plus handling? (see clause 6.9.4.1 and 6.9.4.2 for requirements)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	2c - Has a minimum 4m <sup>2</sup> bulky waste storage area been allocated?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	2d - Have you submitted a detailed plan of the waste bin storage room/area, together with the nominated collection point and access pathway marked?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

3.	Are you using a compactor in the bin storage room? If NO, proceed to question 4	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	3a – Please detail the type of system (carousel, lineal, optic sensors, number of bins, automatic bin exchange, size etc.)	
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	3b – What is the proposed compactor diameter?	
	3c – What is the ceiling height of the waste bin storage room room?	
	3d – What is the proposed compaction ratio? (Must NOT exceed 2:1)	
4.	Is there a garbage chute system installed? If NO, proceed to Section 3	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	4a – Is there a service room provided on each storey?	Yes <input type="checkbox"/> No <input type="checkbox"/>
	4b – Is there sufficient space allocated for 2x 240L recycling bins in the service room(s)?	Yes <input type="checkbox"/> No <input type="checkbox"/>
	4c – How many storeys will the chute service?	

## Section 3: Collection of Waste

1.	Is there a caretaker on-site responsible for managing waste?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	1a - Designate which body is responsible for cleaning of waste storage areas	
	1b - Designate which body is responsible for transfer of waste and recycling bins to and from the collection point (if applicable)	
2.	Are you proposing to use a waste bin presentation area for collection of waste?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
3.	What is the maximum distance from the waste bin storage room/area to the street kerb?	8m
4.	Are you proposing for Council's collection contractor to enter the site to collect the bins? (see clause 6.9.4.3)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

## Section 4: Shop Top Housing and Non-Residential Development

1.	Has a separate waste bin storage room/area been provided for commercial/retail tenancies?	Yes <input type="checkbox"/> No <input type="checkbox"/>
	1a - Does the waste bin storage room/area have sufficient space allocated for storage of estimated bins? (as per Section 1) <b>NA</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>
	1b - Is the waste bin storage room/area size and layout flexible to allow for future changes in use?	Yes <input type="checkbox"/> No <input type="checkbox"/>
	1c - Have you provided the necessary requirements for storage and collection of specific wastes types (i.e food, medical, hazardous etc.)	Yes <input type="checkbox"/> No <input type="checkbox"/>

2.	<div>NA</div> <div><del>Has sufficient space close to retail/commercial premises been allocated for storage of re-usable commercial items such as crates, pallets, kegs etc?</del></div>	<div><del>Yes <input type="checkbox"/> No <input type="checkbox"/></del></div>
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## 2: Waste Generation Rates

### Guide Only

Type of Premises	Waste Generation	Recycling Generation
Backpackers accommodation	40Litres(L)/Occupant/week	20L/occupant/week
Boarding house, Guest house	60L/Occupant/week	20L/occupant/week
Food Premises:		
Butcher	80L/100m <sup>2</sup> floor area/day	Discretionary
Delicatessen	80L/100m <sup>2</sup> floor area/day	Discretionary
Fish Shop	80L/100m <sup>2</sup> floor area/day	Discretionary
Greengrocer	240L/100m <sup>2</sup> floor area/day	120L/100m <sup>2</sup> floor area/day
Hairdresser	60L/100m <sup>2</sup> floor area/day	Discretionary
Restaurants	10L/1.5m <sup>2</sup> floor area/day	2L/1.5m <sup>2</sup> floor area/day dining
Supermarket	660L/100m <sup>2</sup> floor area/day	240L/100m <sup>2</sup> floor area/day
Takeaway	80L/100m <sup>2</sup> floor area/day	Discretionary
Hotel	5L/bed/day 50L/100m <sup>2</sup> bar area/day 10L/1.5m <sup>2</sup> of dining area/day	50L/100m <sup>2</sup> of bar and dining areas/day
Licensed Club	5L/100m <sup>2</sup> bar area/day 10L/1.5m <sup>2</sup> of dining area/day	
Motel (without public restaurant)	5L/bed/day 10L/1.5m <sup>2</sup> of dining area/day	1L/bed/day
Offices	10L/100m <sup>2</sup> /day	10L/100m <sup>2</sup> /day
Retail (other than food sales):		
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 over 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day	50L/100m <sup>2</sup> floor area/day
Showrooms	40L/100m <sup>2</sup> floor area/day	10L/100m <sup>2</sup> floor area/day

Table W.2: Waste Generation Rates

Source: Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC, 2008



### **3: Guidelines for Garbage Chutes, Service Rooms and Compactors**

#### **Garbage Chutes**

Garbage chutes are only suitable to transfer garbage, and not suitable to transfer recyclables for a range of safety reasons, including potential fire hazard. Garbage chutes must be designed and constructed in accordance with the following requirements:

1. The chute must be cylindrical in shape with a diameter of at least 500mm;
2. The chute must be constructed of non-corrosive metal or other suitable smooth impervious material;
3. The chute must be vertical with no bends, off-sets or restrictions and all internal joints and seams finished to a smooth even surface to allow the free flow of garbage through the chute;
4. Chutes should not open onto any habitable or public space. The service openings for depositing garbage into the chute must be located in a dedicated service room (refer to Service Room guidelines below);
5. The service openings must be fitted with a charging device between one (1) metre and one and a half (1.5) metres above floor level and have a cross-sectional area not more than half that of the garbage chute;
6. The charging devices must be self-closing and designed to permit free flow of garbage into the chute;
7. The chute branches from the charging devices must not exceed one (1) metre in length and must be angled to allow the free flow of garbage into the chute;
8. The chute must terminate in a waste bin storage room and discharge the garbage directly into a waste container in such a way that no spillage occurs. This room must not be accessible by residents;
9. A suitable waste bin carousel (or lineal) system is to be fitted in the waste bin storage room which may be used in addition to a waste compactor (refer to Compactors guidelines below);
10. A suitable cut-off device must be provided at or near the base of the chute to effectively close off the chute while the waste containers are being serviced or the compaction equipment is being maintained;
11. The chute, charging devices and service openings must be capable of being easily cleaned;
12. The chute must be ventilated so that air does not flow from the chute through any service opening and the flow of air through the chute does not impede the downward movement of garbage; and
13. The vent at the top of the chute must extend above the roof level and be fitted a weather-proof cowl and wire mesh screen to prevent the entry of rainwater and birds.

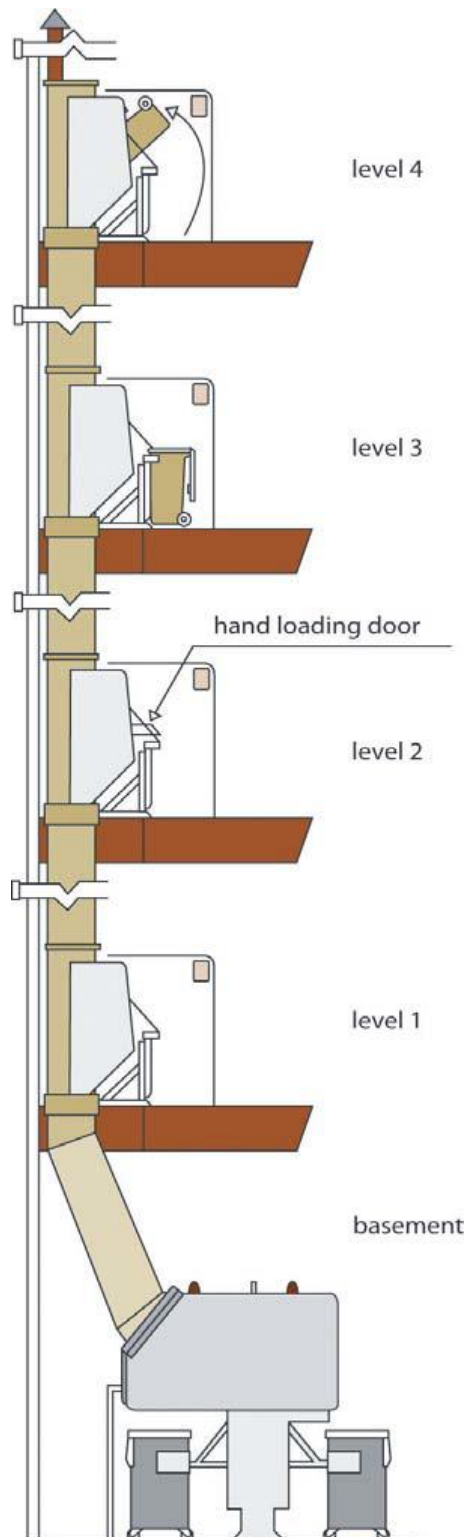


Figure W.1: Garbage Chute

### Service Rooms

Service rooms are to be located on each floor of a building to allow access to the garbage chute. Service rooms must be designed and constructed in accordance with the following requirements:

1. Each service room must be located for convenient access by users and must be well ventilated and well lit.
2. Each service room must include space for two 240 litre bins for the reception of recyclable materials.
3. The floors, walls and ceilings of the service rooms must be finished with smooth impervious materials that are capable of being easily cleaned.
4. The service rooms must contain clear signage that describes the types of wastes that can be deposited into the garbage chute and the types of wastes which should be deposited into the recycling bins.

### Compactors

Compactors are used to compress the waste into smaller collection containers. The compaction ratio must be set at 2:1. Higher ratios must not be used as they may result in heavier bins, causing WH&S problems, as well as damage to the bins. Best practice compaction systems compact directly into a 240 litre MGB, reducing the requirement of manually loading the compacted waste into bins.

Compactors should only ever be used for the garbage waste, not for recycling as they can damage the material.

Compactors require regular maintenance. In particular, systems fed from a chute can be prone to blockages or failure of the “electronic eye”, which can result in garbage overflowing or backing up the chute. To ensure this does not happen, a full-time caretaker should be employed to maintain the bin rooms and the garbage chute system.

